The
CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

APRIL 17 1954

COMBINED ATTACK on Athletes foot



and other fungal dermatoses

Mycil Ointment and Mycil Powder are extremely effective non-mercurial agents for the prevention and treatment of fungal infections of the skin.

'MYCIL' OINTMENT carries the active constituent, chlorphenesin, deeply to the site of infection.

'MYCIL' FOOT POWDER is effective in prophylaxis and in preventing reinfection after clinical cure has been established. It is of value also in combating excessive perspiration.



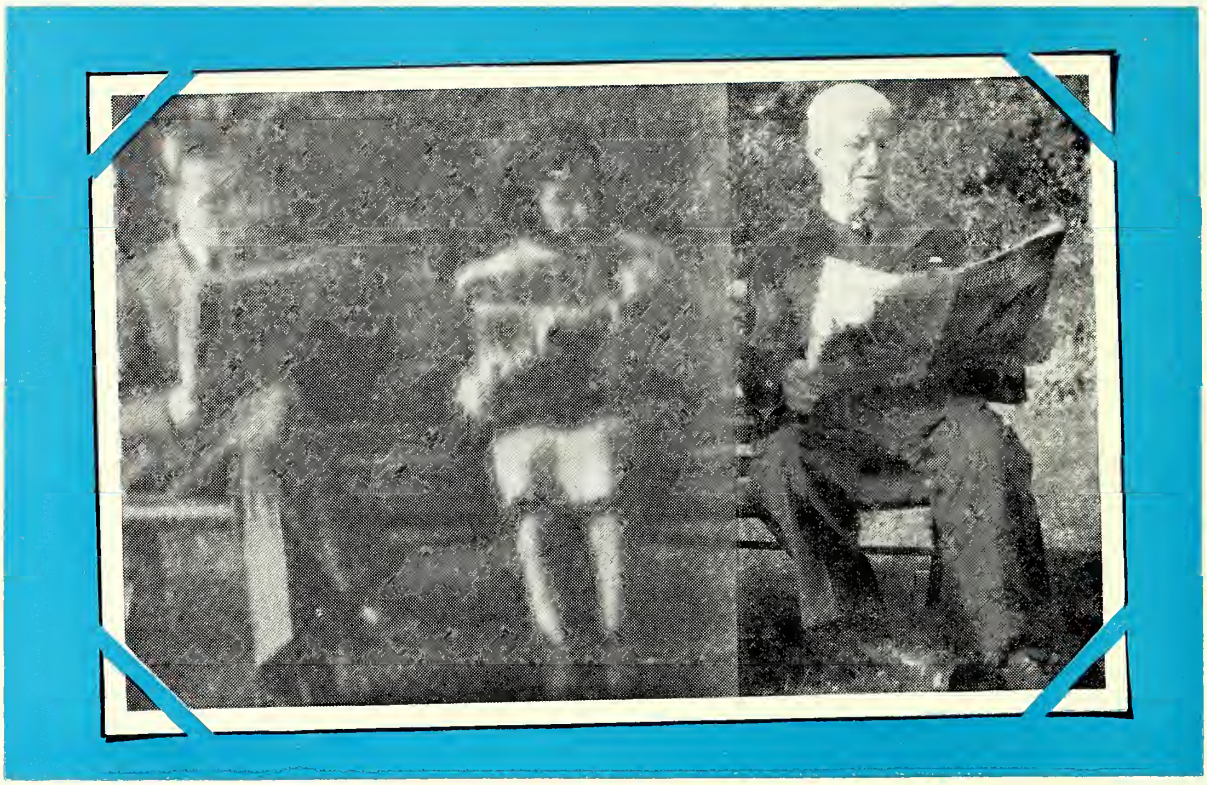
'MYCIL'
TRADE MARK

	TRADE	RETAIL
OINTMENT in collapsible tubes	1/6	2/8
FOOT POWDER in sprinkler tins	1/6	2/8

THE BRITISH DRUG HOUSES LTD. LONDON N.1

Myc/T/541

Needs to be developed fully!



One-third of the market already uses a denture cleaner . . . two-thirds await development

1 in 3 of the twenty million denture wearers already use a specific denture cleaner. But the other two-thirds still use makeshifts. Even kitchen scourers!

Research shows that when customers try Steradent they keep on buying it. Steradent's lively, new, biggest-ever advertising is aimed at those remaining two-thirds!

So just show your customers that you stock Steradent and (if we may strain the metaphor beyond endurance!)...

Develop the other two with

Steradent REG'D

Specially made for cleaning dentures

A BONUS *You will welcome*

on MOORLAND INDIGESTION TABLETS

You are offered a free packet with every dozen ordered for delivery in MAY. *We pay purchase tax on the bonus packet.* **This bonus offer is made to retail chemists only.**

ASSORTED PARCELS ON ADVANTAGEOUS TERMS

Further to the above, the following attractive terms are offered on the parcels named:

2 doz. 1/–d. size @ 6/10d. doz. and a minimum order of 2 doz. 1/11d. size @ 13/6d. doz.
6 doz. 1/–d. size @ 6/8d. doz. and a minimum order of 2 doz. 1/11d. size @ 13/–d. doz.
6 doz. 1/11d. size @ 13/–d. doz. and a minimum order of 3 doz. 1/–d. size @ 6/8d. doz.
12 doz. 1/–d. size @ 6/5d. doz. and a minimum order of 4 doz. 1/11d. size @ 12/6d. doz.
12 doz. 1/11d. size @ 12/6d. doz. and a minimum order of 6 doz. 1/–d. size @ 6/5d. doz.

Purchase Tax payable 25% on basic price of 7/2d. and 14/- dozen.

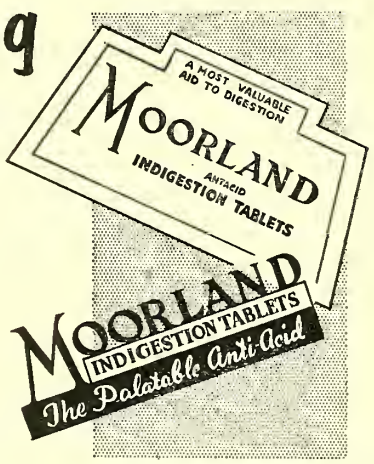
Large Space Advertising

WILL STEP-UP THE DEMAND

MAKE GOOD USE OF OUR

Special Display Material

TO SECURE YOUR SHARE OF THIS PROFITABLE BUSINESS



Two of the effective display pieces which will be supplied free. Ask for them today.

Order your May supplies now to ensure timely delivery.

MOORLAND INDIGESTION TABLETS

1/-d. per packet (1/11d. double size), enjoy an enviable reputation and are quick sellers that will bring you good profits.

W. B. CARTWRIGHT LTD.

Manufacturing Chemists, RAWDON, LEEDS. *Telephone: Rawdon* 713–6 (4 *lines*).



no less than 52,120,000

readers will see this powerful

NYLOSPEX Regd.

advertising!

- ★ NYLON HINGELESS SUNGLASSES WITH UNBREAKABLE FRAMES
- ★ LIGHTWEIGHT—LESS THAN 1 oz.
- ★ CLOSE-FITTING
- ★ CROOKES B_2 LENSES

ENQUIRIES to accredited wholesale distributors to the trade :—

S. MAW SON and SONS LIMITED
Aldersgate House, Barnet, Hertfordshire

RETAIL PRICE 4/6



VITAVEL *Syrup*

a palatable liquid preparation—

containing the principal vitamins in an orange base

FORMULA *One teaspoonful (3.5 cc) contains:*

VITAMIN A	2,500 *i.u.*	VITAMIN C	10 *mg.*
VITAMIN B_1	0.5 *mg.*	VITAMIN D	375 *i.u.*

PRICES

	RETAIL	CHEMISTS	WHOLESALE
6 FL. OZ.:	3/9 *each*	30/- *doz.*	26/3 *doz.*
40 FL. OZ.:	24/- *each*	16/- *each*	14/- *each*

The 6 oz. bottle provides daily vitamin-insurance for one whole month.

VITAMINS LIMITED UPPER MALL LONDON, W.6

Used for a year... Good for another

ANOTHER FLEXTRON TOOTHBRUSH ENTHUSIAST

"I have now used the hard texture Flextron brush which you sent me continuously for a year. It is the best brush by far that I have ever used and I have used it in no uncertain manner. There has been no loosening or dropping at all, it has kept its shape and not bent outwards appreciably, as the ordinary nylon ones do; it has kept hard and strong and is in fact almost as good as new and would I think continue to give excellent service for a further similar period. Others to whom I have mentioned this brush have had equally pleasant experience.

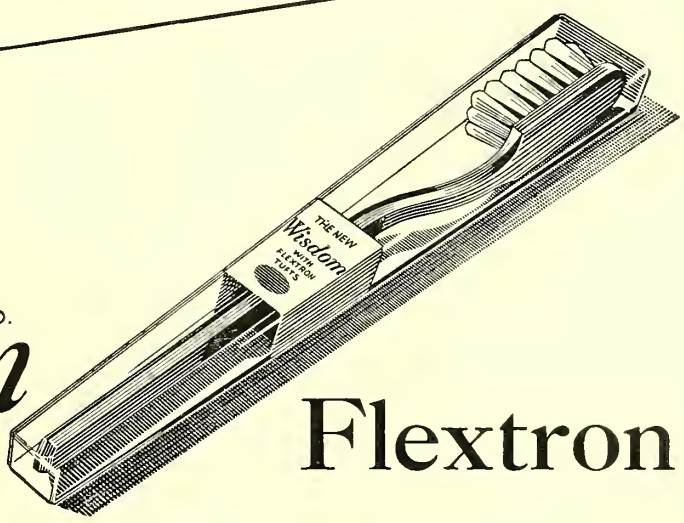
You certainly are to be congratulated on Flextron—it is wonderful stuff."

Wisdom Flextron toothbrushes are without any doubt the finest we have ever made—as important an advance as nylon itself was when it first came out.

They're better toothbrushes—and they give you a better profit, too.

Be wise—sell

Wisdom REGD.



Flextron

WISDOM SELLS TWICE AS FAST AS OTHER TOOTHBRUSHES

NEW

Sandil 'one minute' facial

BONUS

OFFER!

Until 30th April, 1954, there are 2 FREE Sandil cartons in every dozen ordered! Sandil retails at 5/-. Sandil, the new wonder 'ONE-MINUTE' facial containing hexachlorophene, will be widely advertised in women's magazines and national newspapers (see below).

Sandil

ALMOND FRICTION SKIN CLEANSER

Full particulars from:

SANDIL LTD., 15 Whitehall, London, S.W.1.





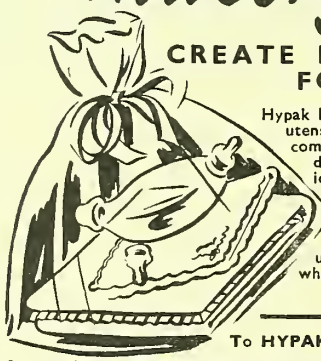
Baby take a bow!

REGISTERED TRADE MARK

HYPAK

BRAND

Nursery Bags



CREATE RECORD SALES FOR CHEMISTS

Hypak Nursery Bags keep Baby's feeding utensils, clothes, toys and bed linen completely protected from all germs, dust dirt and dampness. They're ideal too for carrying soiled nappies and clothes when travelling or visiting. Mothers have been quick to realise the advantages of this new line which is making up record sales in Chemists everywhere. Retail price is 4/9 per pack.

To HYPAK Division of
The OPPENHEIMER CASING Co. (U.K.) Ltd., 159-165 Harrow Rd., London, W.2
(insert Retailer or Wholesaler)
As a ..... I am interested in HYPAK Nursery Bags
Name .....
Address ..... (C & D 17/4/54)

Scottish Sales Depôt: Thornybauk, Fountainbridge, Edinburgh.
Telephone: Fountainbridge 1403

A H

Printing

When considering print remember ..... it must be of the highest standards in design and finish, have suitability to purpose and an objective approach to the selling of your product. We design and produce such printing, and our Service is at your disposal.

ALF. HARRISON & SONS LTD.

Carton, Medical and Advertising Printers

BURLEY ROAD, LEEDS, 4

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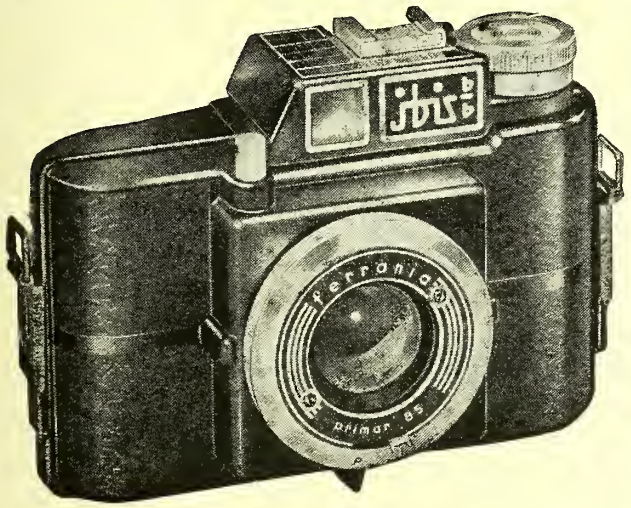
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● A NEW CAMERA FOR NEW BUSINESS



IBIS 27 Takes 8 pictures $2\frac{1}{4}'' \times 1\frac{5}{8}''$ on 127 film. Ferrania Primar 7·5 cm. lens. Brilliant optical eye-level viewfinder. Sturdy metal construction — attractive leather finish. Safety device prevents accidental exposures. **£3 . 15 . 0.**
Ever-Ready Case 17/11

ferrania
IBIS $2\frac{1}{4}'' \times 2\frac{1}{4}''$

Takes 12 pictures $2\frac{1}{4}'' \times 2\frac{1}{4}''$ on F20 film. Ferrania Primar 8·5 cm. lens. Synchronised for flash photography. Optical eye-level viewfinder. Instantaneous and time exposures. Die-cast body with leather finish.

ONLY **£4 · 18 · 6**
Ever-Ready Case £1 : 1 : 3

NEVILLE BROWN & COMPANY LTD
77 NEWMAN STREET · LONDON · W.1 Telephone : LANgham 7161 (10 lines)

DISTRIBUTED by NEBRO

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When a Disprin tablet *dissolves*

you have calcium aspirin in solution

DISPRIN REGD *Provides stable, soluble, palatable calcium aspirin.*

RECKITT & COLMAN LTD., HULL AND LONDON (PHARMACEUTICAL DEPT., HULL)

MYXOMATOSIS-

protection now available for rabbits

Myxomatosis, the contagious, fatal disease which has decimated the rabbit population of Australia is now established among wild rabbits in certain parts of this country. It is expected that the disease will spread as a result of biting-insects during the coming season. 'Wellcome' brand Myxomatosis Vaccine, a tissue suspension containing the virus of Shope fibroma, is now available for the immunisation of domestic rabbits. A useful level of protection which lasts at least six months is achieved in the great majority of vaccinated animals. The dose is 0·5 c.c., injected subcutaneously in healthy rabbits over four weeks old. The vaccine, which is being officially recommended as one of the methods for the protection of domestic stock, is issued in containers of 5 c.c. (10 doses) at the price of 3/6d. (subject to discount). Because it is a living virus vaccine with a life of fourteen days from the date of preparation, material should be ordered to meet specific requirements only.

'WELLCOME' BRAND

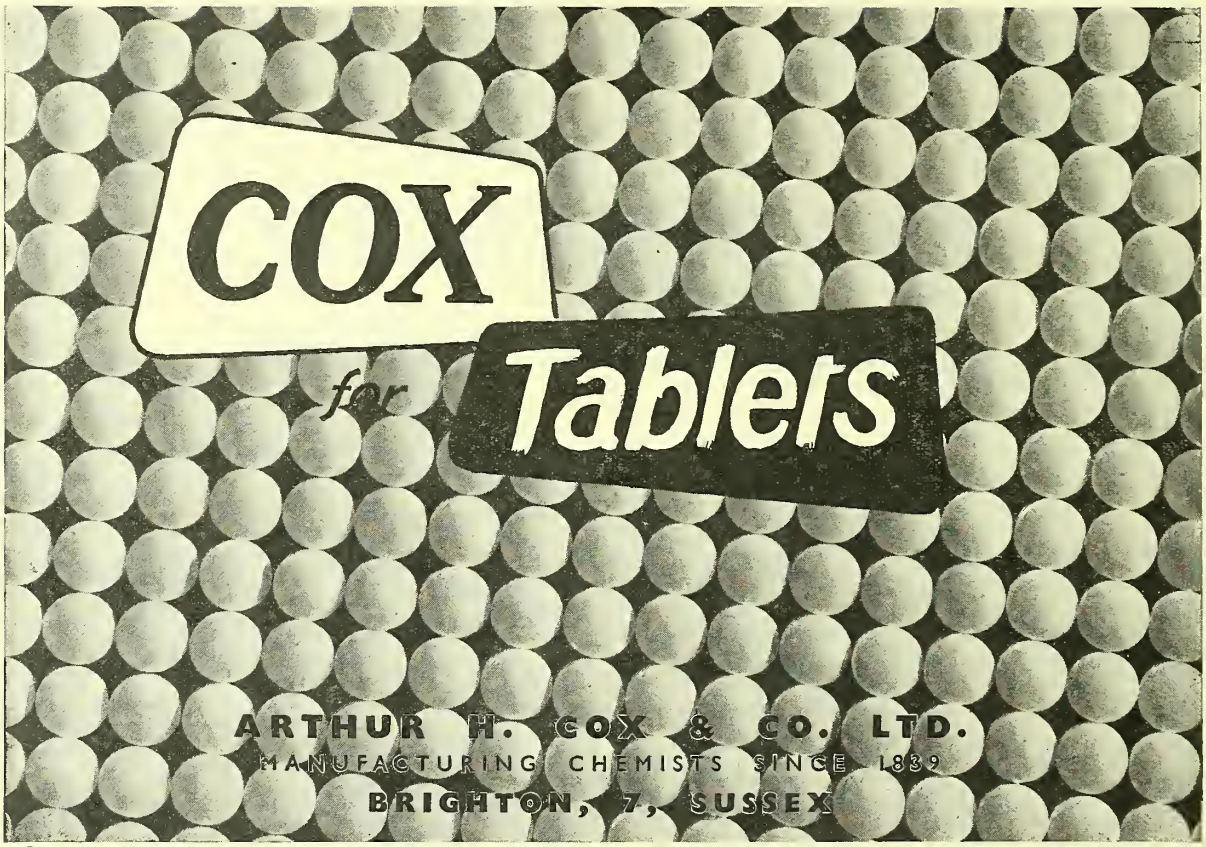
Myxomatosis Vaccine

(Shope fibroma virus, Living)

PREPARED AT THE WELLCOME RESEARCH LABORATORIES, BECKENHAM

Supplied by

BURROUGHS WELLCOME & CO. *(THE WELLCOME FOUNDATION LTD.)* **LONDON**



Summer brings **BIGGER VENSILLA SALES**
and Vensilla brings **BIGGER PROFITS**

Make sure you get both!

Vensilla Soluble Towels (good quality pure cellulose towels with rounded ends, woven gauze covers, and securely attached loops) will soon be in still heavier demand with the approaching summer season.

You should sell them not only because of their quality, **but because they can bring you extra profits under the Silcot Discount Plan.** On Silcot Cotton Wool Towels and Vensilla you can make as much as 10d. more per dozen packets under the Plan.

Get ready now for **bigger** Vensilla sales and get the **bigger** profits!

"THANK YOU" THEY SAY, FOR THE EXTRA DISCOUNTS

This is what some retailers say about the extra discounts under the Silcot Discount Plan:

"Many thanks for the extra discount . . . I congratulate you most heartily on having introduced this system."
Yorkshire, 6th March

"We thank you for credit note for extra discount of 3¾%. We find it very satisfactory, and hope to sell even more of your products in future."
Suffolk, 26th February

"Many thanks for credit note for extra discount. We find Silcot a very popular towel here."
London, 26th March

Vensilla SOLUBLE TOWELS

MACDONALD & SON LTD : HOPE MILLS : POLLARD STREET : MANCHESTER 4

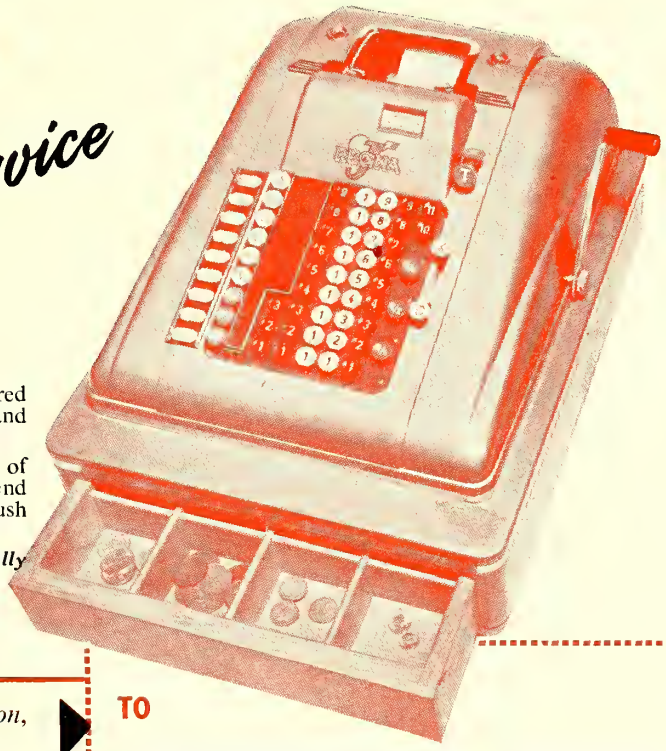


You, too, can have a slave ...

. . . a handsome, streamlined, efficient slave, costing well below what you'd expect to pay. An Automatic Brain that not only records and speeds cash transactions and credit sales, but can issue receipts, do book-keeping, and in its spare time act as an adding machine, too ! All this, at the simple touch of a button !

REGNA CASH REGISTER

for silent, certain service



Clear view window shows each amount rung up.

New ribbon printing device provides single or *double* cash receipts: one for your customer, one for your records.

Feather Touch push button operation with Keys designed and numbered for minimum finger and eye fatigue.

Sub-totals at any hour of the day ; totals at the end of the day by special push button controls.

Manually or Electrically Operated Models.

PRICES FROM £78 H.P. TERMS ARRANGED

Please send particulars, without obligation, of the Regna Cash Registers.

MAY WE DEMONSTRATE?

THE REGNA CASH REGISTER CO.

Proprietors: The Joeli Safe Co. (London) Ltd.
7 York Place, Adelphi, London, W.C.2.
Telephone: TRAfalgar 3718

TO

The Regna Cash Register Co., 7 York Place, Adelphi, London, W.C.2

Name .....

Address .....

.....

REGNA — THE CASH REGISTER TO RECKON WITH

B

Only a few more days to order these MONEY MAKERS!



LIQUID in 8 oz., 16 oz., 32 oz. and 160 oz. tins

POWDER—new style 2 oz. Puffer Pack.

FLYCARDS— 24 transparent envelopes (each containing 3 cards) in display unit.

YOU STOCK THEM— WE SELL THEM FOR YOU!

Great NEW national advertising campaign starts in the Spring!

FLIT REGD. TRADE MARK World's No. 1 Insecticide — Another Esso Product

1954 FLIT BONUS

REGD TRADE MARK

Latest delivery date APRIL 30TH

Look at the PROFITS you'll make!

58% PROFIT on every £10 order costs £9

53% PROFIT on every £8 order costs £7-8-0

50% PROFIT on every £5 order costs £4-15-0

Choose from these big offers!

On mixed orders for FLIT Liquid Insecticide, FLIT Sprayers, FLIT Powder and FLIT Flycards, **you get these Special Discounts—**

10% ON ALL ORDERS TO LIST VALUE OF **£10** AND OVER

7½% ON ALL ORDERS TO LIST VALUE OF **£8** AND OVER

5% ON ALL ORDERS TO LIST VALUE OF **£5** AND OVER

NOTE: FLIT Flycards may now be included in Bonus Parcels in minimum quantities of 6-dozen lots. All list prices and prices to public remain unchanged.

FLIT LIST PRICES

Size	Packed in Outers Containing	Retail Price	List Price
8-OZ.	2 DOZ.	1/9 EA.	15/- DOZ.
16-OZ.	1 ,,	3/- ,,	25/- ,,
32-OZ.	1 ,,	5/3 ,,	44/- ,,
160-OZ.	SINGLY	20/- ,,	168/- ,,
160-OZ. LIVESTOCK SPRAY	,,	12/6 ,,	105/- ,,
FLIT SPRAYERS	1 DOZ.	3/9 ,,	32/- ,,
2-OZ. FLIT POWDER PUFFER PACK	2 ,,	1/2 ,,	9/4 ,,
4-OZ. FLIT AEROSOL	1 ,,	5/9 ,,	50/6 ,,
6 OZ. FLIT AEROSOL	1 ,,	7/6 ,,	65/10 ,,
12-OZ. FLIT AEROSOL	½ ,,	12/6 ,,	109/6 ,,
FLIT FLYCARDS	¼ GROSS	4d. ,,	32/- GROSS

ORDER NOW AND DISPLAY FLIT FOR EARLY SALES!

To qualify for bonus terms, orders must be placed either direct or through your wholesaler *in time for delivery by April 30th, 1954.*

Bonus orders for Aerosols must be kept separate.

STEMCO LTD., 128-132 ALBERT STREET, CAMDEN TOWN, LONDON, N.W.1

SPECIAL BONUS ON FLIT AEROSOLS ONLY

5% on all orders for 4 doz. 4 oz. size, or equivalent assortment of 4 oz., 6 oz. and 12 oz. sizes.

2½% on all orders for 2 doz. 4 oz. size, or equivalent assortment of 4 oz., 6 oz. and 12 oz. sizes.

Suggested Parcels to Qualify for—

5% BONUS

4 DOZ. X 4 OZ.

Or 1 DOZ. X 4 OZ. 2 DOZ. X 6 OZ.

Or 1 DOZ. X 4 OZ. 1 DOZ. X 6 OZ. ½ DOZ. X 12 OZ.

Or 1 DOZ. X 4 OZ. 1 DOZ. X 12 OZ.

2½% BONUS

2 DOZ. X 4 OZ.

Or 1 DOZ. X 4 OZ. 1 DOZ. X 6 OZ.

Or 1 DOZ. X 4 OZ. ½ DOZ. X 12 OZ.

NOTE: Flit Aerosols are packed to **Full Capacity**—containing an average net weight of 4 oz., 6 oz., or 12 oz.

CAMILATONE SYNTHETIC HENNA CREAM

BONUS OFFER

until June 1st.

6 Tubes FREE with orders of 2 dozen and over

Take advantage of this great introductory offer. Have Henna Cream on display as NATIONAL ADVERTISING BEGINS. A trouble-free method of giving lasting auburn tints, HENNA CREAM is what thousands of women have been waiting for. They'll know all about it soon through advertising in mass circulation women's magazines. ORDER NOW.

LOOK AT THE TERMS AND PROFIT YOU GET BY ORDERING 2 DOZEN TUBES BEFORE JUNE 1st

		£ s. d.
2½ dozen tubes at 18/8d. per dozen		2 6 8
Plus Purchase Tax		1 15 0
		4 1 8
Deduct bonus 6 tubes and quantity discount	9. 4 1. 10	11 2
Net cost to you		3 10 6
Selling at 3/6d. a tube		5 5 0
Profit!		2 14 6

NEARLY 1/2d. A TUBE!



Lovely, auburn-haired Piper Laurie now starring in Universal International's 'Johnny Dark' appears in all Henna Cream advertising

CAMILATONE SYNTHETIC HENNA CREAM

Display outers and showcard supplied.

CAMILATONE LTD., EDGWARE ROAD, LONDON, N.W.9.

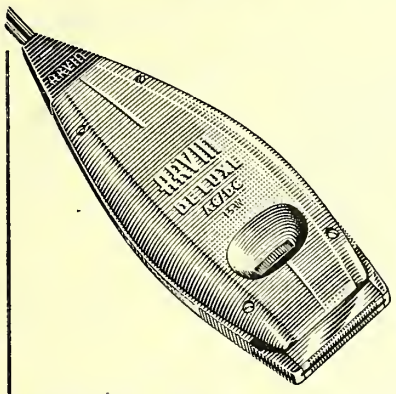
Regular ARVIN advertisements in all these papers

Radio Times Daily Express News of the World
Daily Mail Daily Telegraph Sunday Dispatch
Sunday Express People Reveille Weekend Mail
Eagle Readers Digest Boy's Own

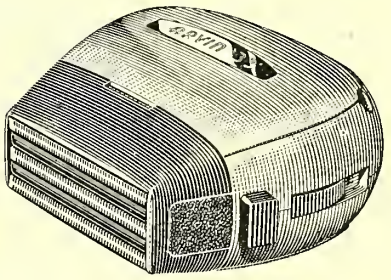
will stimulate demand and enquiries for these three ARVIN electric shavers



ARVIN "CONSORT" For A.C. mains only; with "Slim-Twin" cutting head; retails at 63/5. A best seller, this model, offering the finest value on the market.



ARVIN "DE-LUXE" For AC/DC mains; also with "Slim-Twin" precision cutting head; packed in smart, modern "Wind-a-Pak"; a real eye-catcher in display. £4.11.5 retail.



ARVIN "33" The new, luxurious triple-headed shaver with rhomboid cutting shears — a unique advantage. Dual Voltage. Packed in handsome real Hide case. Retails at £8.19.9.

So display the shavers and leaflets and keep them on display!

ARVIN ELECTRIC SHAVERS

TB ARVIN ELECTRIC LTD., FERNBROOK AVENUE, SOUTHEND-ON-SEA

C

Velouty de DIXOR POWDER CREAM

performs a special task in the art of achieving complexion beauty. It enjoys immense popularity and by displaying this excellent preparation you will take your share of this source of consistently good business.

Tubes packed in attractive display outers of one dozen, and jars in outers of half-dozen.

Popular Shades:
IVORY
NATURAL
PEACH
OCHRE
SUNGOLD

TUBES
No. 2 No. 3
Trade
6/- doz. 9/6 doz.
Retail
1/2 each 1/10 each

JARS
TRADE 13/2 doz.
RETAIL 2/6 each



DIXOR LTD.
ST. LEONARD'S WORKS., MORTLAKE, S.W.14

LYPSYL ON EVEREST COMPETITION

HERE ARE THE WINNERS:

£100 1st prize: J. Rose, Ltd., 20 Station Road, Urmston.

£50 2nd prize: A. Priestley, Farnworth and Kearsley Ind. Co-op. Soc., Ltd., Pharmacy Dept., 7 & 9 Brackley Street, Farnworth, Lancs.

£25 3rd prize: Frederick Archer, Chester Co-op. Soc., Ltd., Foregate Street, Chester.

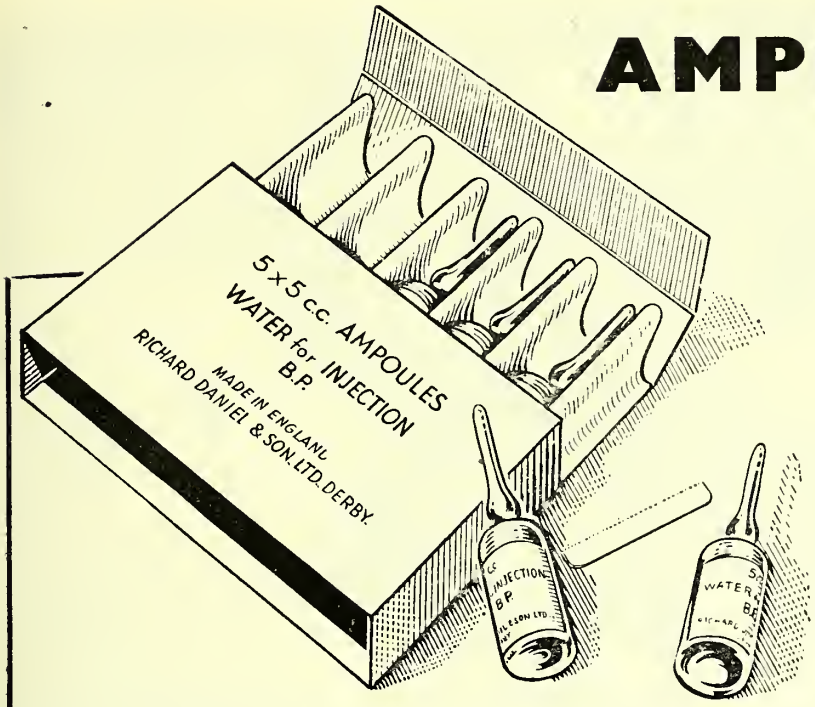
£10 prizes: F. Kershaw, Alderley Edge, Cheshire. Nigel Gerard, Capitol Pharmacy, Seaview Road, Wallasey. Brian F. Nichols (H. W. Herbert, Ltd.), 23 London Road, Camberley, Surrey; Donald L. Rogers, 548 Wollaton Road, Nottingham. Colin Brough (Messrs. Ralph Cuthbert, Ltd.), 10-16 Westgate, Huddersfield, Yorks.

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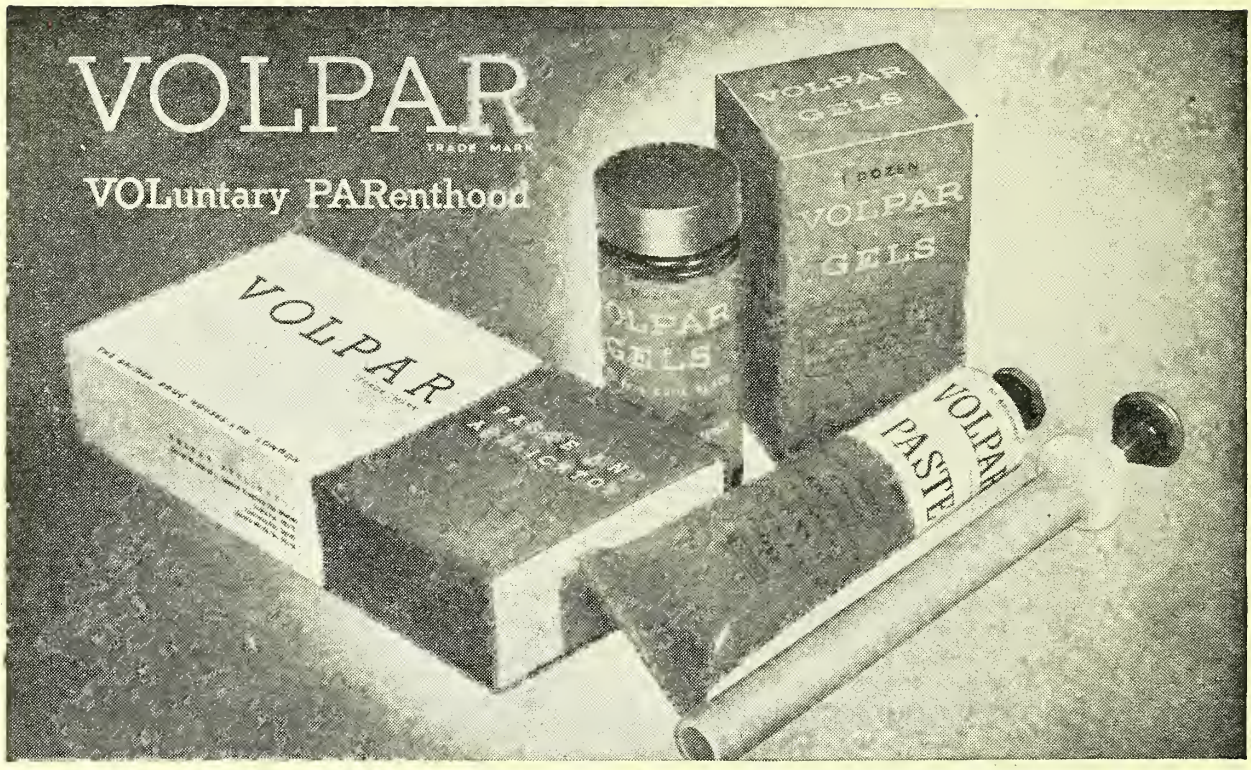
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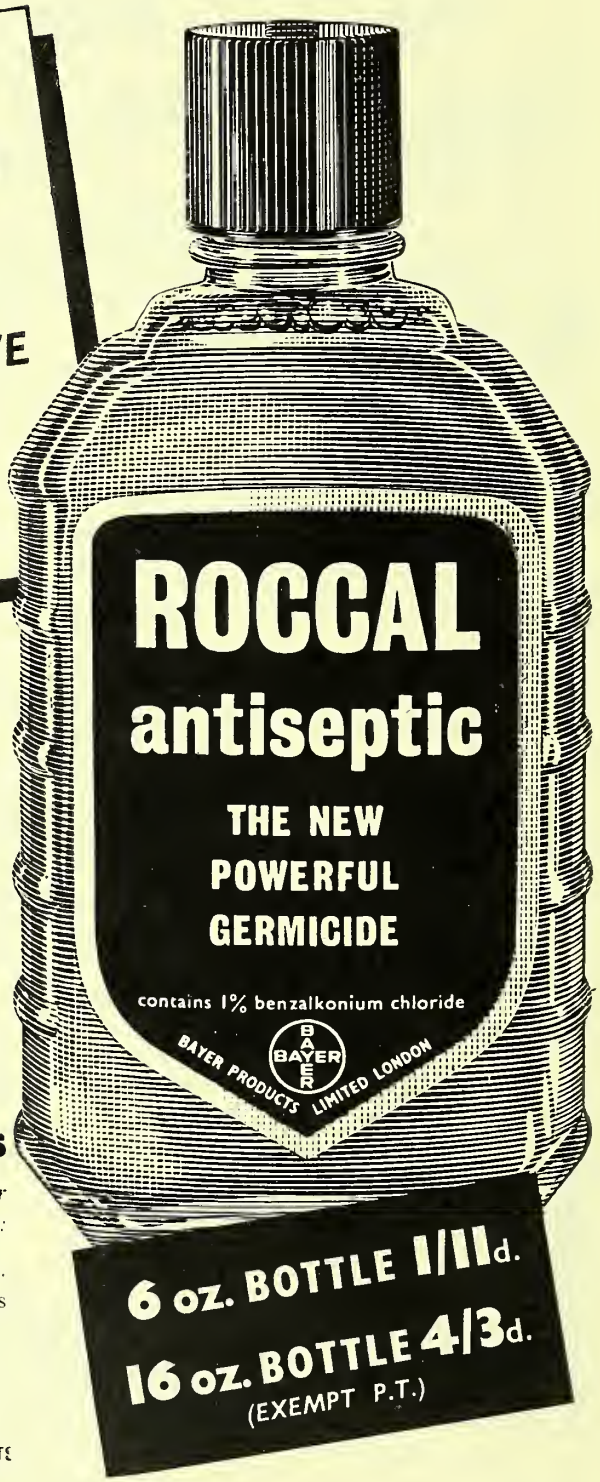
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ESTABLISHED 1859

The weekly newspaper for pharmacy and all sections of the drug, pharmaceutical and fine chemical, cosmetic, and allied industries

Official organ of the Pharmaceutical Society of Ireland and the Pharmaceutical Society of Northern Ireland

Volume 161 April 17. 1954 No. 3869

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The CHEMIST AND DRUGGIST

Volume 161 APRIL 17, 1954 No. 3869

Guillebaud Committee

EXECUTIVE COUNCILS' EVIDENCE

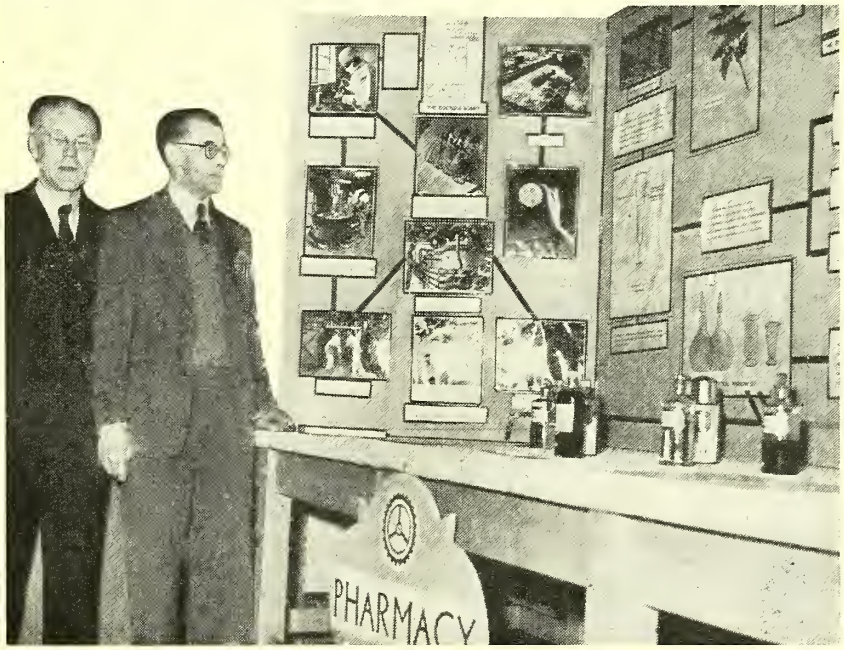
THE following points are made in a memorandum of evidence drawn up by the Executive Councils' Association, which at a recent meeting of the Association's management committee was approved for submission to the Guillebaud committee :—

It is stated that the Association subscribes to the policy that a patient is entitled to proper and necessary drugs at the discretion of his doctor and that the definite banning of specified drugs would be baneful. Public advertising of remedies results in embarrassing pressure being brought upon doctors by credulous patients. A return to the system of full prescription pricing and compilation of drug statistical data would lead to the early detection and prevention of excessive prescribing, without needing much additional labour. A reduction in pricing costs might be effected by a scheme for the education of the prescriber: The efficacy of new preparations should be ascertained and made known to prescribers; personal visits to doctors showing higher-than-average prescribing costs should be made by medical men qualified to speak on the subject; and offending doctors should be brought before their Local Medical Committee (which should be empowered to impose penalties). The prescribing of expensive proprietaries in hospitals should be kept under review as patients, on transferring to their own doctors for treatment, expect similar prescribing. One EC10 form only should be used for one person. A limit should be set upon the profit which a dispenser receives from any one prescription. "It should not be possible for a chemist to make a profit of £5 or £10 on merely ordering and handing a bottle of tablets across the counter." The Association thinks a profit ceiling of £2 would not be unreasonable. When a patient dies or is transferred to hospital his supply of drugs and appliances should be collected where appropriate and handed to the nearest general hospital. There is a "fair and growing volume of opinion" that the system of returnable cash deposits on medicine bottles should be re-introduced. Chemists, however, are not in favour of that but their objection might be met in part if bottle laundries could be established. With regard to supplies of oxygen and oxygen equipment the Association recommends that (i) all prescriptions should be priced promptly as a priority; (ii) where cylinders and apparatus are retained over lengthy (agreed) periods or large quantities are ordered the prescriber should make a report to the Local Medical Committee; (iii) delivery to and from a patient's bedside should always be a charge on the public funds; (iv) in rural, semi-rural or mileage areas Executive Councils should be empowered to make arrangements with hospitals, or otherwise, for free delivery to and from a patient's home and for the servicing of appliances.

ORIGINAL PACKS

Supply under N.H.S.

A CIRCULAR being sent to chemist contractors by Executive Councils describes changes in the Drug Tariff, April 1954, which permit of the supply of original packs of creams, balms and ointments put up in tubes, and inhalants, sprays and drops put up in dropper bottles or other special containers, nearest to the quantity prescribed. Where products are available both in small original packs and in large dispensing packs, orders for reasonably large quantities should, if demand justifies it, be supplied from bulk. On orders for "large size" the largest ordinary pack should be supplied from bulk: whole bulk packs should only be supplied if the prescriber has indicated clearly that that quantity is required. The circular gives examples. One is that where a preparation is supplied in 20-gm. tube and 16-oz. jar, orders of over 3 oz. should be supplied from bulk. When 3 oz. or less is ordered tubes should be supplied; e.g., for ½ and 1 oz. prescribed, supply one tube; 1½ oz., two tubes; 2 oz., three tubes; 3 oz., four tubes or ex bulk. In such cases payment will be made according to the pack supplied but dispensers are still required to supply the exact prescribed quantities of Schedule IV poisons, Dangerous Drugs, or antibiotics. However, where an antibiotic preparation is of a nature demanding the supply of an original pack the prescriber's consent to the substitution of the available pack should be obtained: that does not apply to oral tablets, to branded suspensions containing benzathine penicillin, nor to solutions or suspensions of chloramphenicol, of which the exact quantity ordered should be supplied.



PUBLICITY FOR PHARMACY AS A CAREER: Stand organised by the Torquay and District Chemists' Association at an "exhibition of careers" by the South Devon Rotary Club. In the picture are Mr. T. Evans and Mr. G. A. Clarke, two of the oldest members of the Association.

RESOLUTIONS FROM BRANCHES

Amendments accepted

THE following amendments to resolutions tabled for discussion at the Branch Representatives' meeting of the Pharmaceutical Society (see *C. & D.*, February 27, p. 204) have been added to the agenda for the meeting:—

Birkenhead resolution (2) [on duration of apprenticeship].

After "two years before" insert "or after." (Exeter Branch.)

Bradford resolution (2) [on revision of the Charter].

Delete "confirmed" and substitute "approval." (Portsmouth Branch.)

Dartford resolution [an educational number of *Pharmaceutical Journal*].

Delete "to be published in June." (Reading Branch.)

Glasgow and South-western Scottish resolution [on shop hours].

After "shop hours" delete "prescribed by the Local Authority." (Exeter Branch.)

In place of the words "shop hours prescribed by the Local Authority" substitute "contractual hours prescribed by the Ministry of Health." (Huddersfield Branch.)

Delete "that normal hours shall be defined as the shop hours prescribed by the Local Authority, together with rota hours approved by the Local Executive Council" and substitute "that normal hours shall be defined as the hours of service prescribed by the Local Executive Council together with approved rota hours." (Reading Branch.)

That the second part of the motion shall read: "That normal hours shall be defined as the hours laid down by the National Health Service Act, together with rota hours approved by the Local Executive Council." (Stockport Branch.)

Leeds resolution (2) [on apprenticeship].

Delete "or, in two periods of one year before and one year after the Qualification course and examination." (Reading Branch.)

Monmouthshire and Newport resolution [on territorial responsibility].

Delete "responsibility" and substitute "representation" and delete "seriously considered" and substitute "implemented." (Exeter Branch.)

Portsmouth resolution (1) [on reports of Council meetings].

That it is the opinion of this meeting that the minutes of the Council of the Pharmaceutical Society and its Committees should be circulated to branch secretaries each month for perusal by branch members if so desired. (Southend Branch.)

Reading resolution (2) [on co-option to Council].

Add "and so down the list of candidates in succession." (East Metropolitan Branch.)

Slough resolution [on area responsibility].

Delete "responsibility" and insert "representation." (Exeter and Herefordshire Branches.)

Walsall resolution (2) [on the Fellowship].

Reword as follows: "The conferring of the Fellowship by a traditional form of examination is a retrograde step and the original suggestion of conferring it as an honour should be reconsidered and immediate action taken to institute a system of endorsement subjects each of independent utility and which will qualify with a covering dissertation for the award of the Fellowship." (Portsmouth Branch.)

LOCAL NEWS

Manchester Students' London Visit

THIRTY-FIVE students and five members of the staff of the pharmacy department, Manchester University, were in London recently on a three-day visit. They went to the Ware, Herts, factory of Allen & Hanburys, Ltd., where they saw, among other things, exhibits in the pharmaceutical development laboratories and demonstrations of high-vacuum distillation, climbing-film evaporation, and freeze drying, and heard an account of the development of synthetic analogues of *d*-tubocurarine; later the tourists visited the company's Vere Street, London, pharmacy. The works of the British Drug Houses, Ltd., London, were visited on the second day, when the students saw ampouling, filling, and the work of the analytical laboratories, and heard an account of the manufacture of insulin. On the third day, at the Dartford factory of Burroughs Wellcome & Co., they saw the company's insulin plant in full production and had the processes explained.

Liverpool Essay Prize

THE DC(B)L English essay prize, 1954, consisting of pharmaceutical technical and reference books, and presented by the Distillers Co. (Biochemicals), Ltd., for competition at the department of pharmacy, College of Technology, Liverpool, has been won by Mr. Gwilym Pennant Roberts, a first-year student. Mr. Roberts received his prize at an informal meeting held in the department on April 6.

SCOTTISH NEWS

Health Department Report

THE report for 1953 of the Department of Health for Scotland, published recently, gives the estimated number of prescriptions dispensed in 1953 as 2,049,500, 106,000 more than the 1952 figure. It states that the average cost per prescription rose in the earlier part of the year but fell sharply in August and remained at a lower level, and appears to have been associated with publication of the Cohen Committee's list of proprietary medicines. As an outcome of the scrutiny of prescriptions for instances of extravagant prescribing, sums varying from 5s. to £50 were withheld from thirteen doctors and sixteen other doctors were warned. £109 was recovered from 139 doctors who had prescribed food, toilet preparations, etc., considered not to be drugs. The report is published by H.M. Stationery Office, 4s. 6d.

An Attack on the Shilling Levy

CAITHNESS Executive Council discussed at a recent meeting, a letter from the Department of Health for Scotland reviewing arrangements for the collection of the shilling charge from patients whose medicines were provided by doctors (see *C. & D.*, February 20, p. 179). A medical member said that the collection of shillings should be either abolished or an alternative method of collection established. The Council unanimously decided to recommend to the Association of Executive Councils that the shilling charge should be abolished.



IRISH STUDENTS AND GUESTS: The committee and some guests of the Society of Pharmaceutical Students of Northern Ireland at a recent function. In the centre is Mr. J. L. Hill (chairman of the Society).

IRISH NEWS

Ulster Chemists' Association

AT the monthly meeting of the executive committee of the Ulster Chemists' Association, Mr. H. G. Campbell (president) welcomed from the chair Mr. R. A. Mackintosh and the secretaries and other officers of eight local associations. The following were elected to membership:—Messrs. I. Miller, 9 Summerhill Avenue, Belfast; E. R. Wightman, 124 Newtownards Road, Belfast (successor to Mr. J. A. Brown); J. Gould, 82 Abbey Street, Bangor; W. P. Ewart, 136a High Street, Holywood. The following, whose applications were approved by the Associates' Committee at a previous meeting, were elected to Associateship:—*Assistant,* Miss A. Gilleece; *Apprentices,* Misses K. Bradley, B. P. Henry; Messrs. J. P. Beagon, R. F. S. Thornton. Miss A. E. Strachan (secretary) reported that the proceeds of the recent whist drive in aid of the Northern Ireland Chemists' Benevolent Fund had amounted to £25. Reference was made by Messrs. M. McKay and F. J. Sweeney to the sale from vans of Schedule IV preparations for veterinary use. Mr. W. E. Webb said that it was most unsatisfactory that a chemist in his pharmacy had to observe regulations so rigidly in the sale of Schedule IV preparations for human use, whereas it would appear that unqualified persons were permitted to sell such preparations freely for veterinary use.

Present at the meeting were Miss C. E. Culbert, Messrs. J. C. Acheson, W. H. Boyd, J. A. Brown, J. Caldwell, H. W. Gamble, R. Gibson, T. A. Gibson, C. L. Gordon-Rattie, W. S. Hall, W. J. Moffett, M. C. Mooney, W. H. Mulholland, W. L. McDonnell, R. A. McEwen, J. McGregor, W. R. McNabb, J. Paul, C. A. Quinn, W. J. Rankin (treasurer), P. R. W. Shinner, A. Steede, A. Templeton, Miss A. E. Strachan (secretary). By invitation: Messrs. R. A. Mackintosh, V. A. Henning (East Antrim Pharmacists' Association), H. Y. Ferguson (Londonderry and Strabane Chemists' Association), S. McMurray, M. McKay, D. Moore (East Down Chemists' Association), B. McConville (Lurgan Chemists' Association), F. J. Sweeney (Newry and District Chemists' Association); R. McCutcheon, W. E. Webb (North Down Chemists' Association), G. McCloy, W. F. Mansfield (North East Ulster Chemists' Association); W. J. Moore, N. A. J. Anderson (Portadown Chemists' Association).

NEWS IN BRIEF

Women Pharmacists' Badge. — The women pharmacists' presidential badge, recently presented at Liverpool (see *C. & D.*, April 3, p. 334) was given to the Merseyside Branch of the National Association of Women Pharmacists and not as stated.

Entente Cordiale.—On the occasion of the fiftieth anniversary of the signing of the *Entente Cordiale* between France and Great Britain telegrams were exchanged between the Pharmaceutical Society and the *Ordre National des Pharmaciens de France.*

Travellers' Schools Appeal. — An appeal on behalf of the maintenance and rebuilding funds of the Royal Commercial Travellers' Schools is being broadcast on May 16 in the Home Service programme of the British Broadcasting Corporation.

LOCAL OFFICERS

Guild of Public Pharmacists

Manchester Branch.—*Chairman,* Miss K. Applewhite; *Vice-chairman,* Mr. K. A. Hume; *Treasurer,* Mr. W. T. Chatterton; *Secretary,* Miss I. F. A. Lewis, Monsall Hospital, Manchester, 10; *Social Secretary,* Miss E. O. Fairhurst.

Pharmaceutical Society

Scunthorpe Branch.—*Chairman,* Mr. D. Westaby; *Vice-chairman,* Mr. T. H. Millns; *Secretary and Treasurer,* Mr. O. Duffelen, 13A Beechway, Lincoln Gardens, Scunthorpe.

Aberdeen and North-eastern Scottish Branch.—*Chairman,* Mr. W. Park; *Vice-chairman,* Mr. R. Cowie; *Treasurer,* Miss E. M. Ewen; *Secretary,* Mr. G. Dickie, 4 Deeside Terrace, Aberdeen.

Dundee and Eastern Scottish Branch.—*Chairman,* Mr. M. S. Maconochie; *Vice-chairman,* Mr. J. Jolly; *Joint secretaries,* Miss E. Fyfe, 140 Albert Street, Dundee, and Mr. D. C. C. Wallace, 126 Hilltown, Dundee.

Slough Branch. — *Chairman,* Mr. P. Jones; *Vice-chairman,* Mr. K. Lees; *Treasurer,* Mr. A. Saw; *Joint secretaries,* Mr. T. A. Barrow, 7 Buckingham Avenue East, Slough, and Mr. J. C. S. Parsons, 23 Grove Parade, High Street, Slough.

Chesterfield Branch.—*Chairman,* Mr. C. E. V. Hancock; *Vice-chairman,* Mr. A. V. Smart; *Treasurer,* Mr. H. E. Keetly; *Secretary,* Mr. A. Livesley, 35 Market Place, Chesterfield.

Worcester Branch. — *Chairman,* Mr. C. A. Stephens; *Vice-chairman,* Mr. H. S. Coverdale; *Treasurer,* Mr. C. H. Elliot; *Secretary,* Mr. N. V. Mills, 97 West Malvern Road, West Malvern.

Plymouth Branch. — *Chairman,* Mrs. O. B. Adams; *Treasurer,* Mr. J. P. Fox; *Social Secretary,* Mr. W. J. Gale; *Secretary,* Mr. A. G. M. Madge, P.C.S., Pharmacy Office, Vauxhall Street, Plymouth.

Registered Pharmacists' Union

President, Mr. G. H. Sheard; *Vice-president,* Mr. F. J. Neale; *Treasurer and Assistant secretary,* Mr. W. T. L. Hives; *Secretary,* Mr. D. J. Gibson, 51 Ashburnham Grove, Greenwich, London, S.E.10.

Pharmaceutical Committees

Hull. — *Chairman,* Mr. E. A. Brocklehurst; *Treasurer,* Mr. C. A. Hewitt; *Secretary,* Mr. H. Bays, 45 Witham, Hull.

Middlesex.—*Chairman,* Mr. E. Ratcliffe; *Vice-chairman,* Mr. H. G. Moss; *Secretary,* Mr. J. Anderson Stewart, 21 Bloomsbury Square, London, W.C.1.

National Association of Women Pharmacists

National Council.—*President,* Mrs. A. Greenwood; *Vice-president,* Mrs. N. Williams; *Treasurer,* Miss O. W. Scarlett; *Registrar,* Miss M. C. Dodd; *Employment Secretary,* Mrs. R. Quintrell, 182 Upper Richmond Road, London, S.W.4; *Secretary,* Mrs. E. N. J. Jones, 6 Ravenswood Avenue, Rock Ferry, Cheshire.

TOPICAL REFLECTIONS

By Xrayser

Thoughts from Manchester

The Manchester Branch of the Guild of Public Pharmacists has been fortunate in securing a strong team to answer questions put at a recent meeting (p. 360). The panel consisted of Dr. Colin Melville and Messrs. A. G. Fishburn, J. B. Lloyd and H. Steinman. Meetings of this kind often bring to light an unusual subject, to the advantage of members of the audience and even—dare I add ?—of occupants of the platform. At this Manchester meeting a question on the meaning of the word "ethical" as applied to pharmacy produced what I regard as the most interesting replies of any. The nature of ethics was already, I think, a familiar subject when Aristotle wrote his treatise on it. The S.O.E.D. gives both a general and a particular meaning as in current use. The one is "the science of human duty in its widest extent"; the other is "the rules of conduct recognised in certain limited departments of human life." The question referred, no doubt, to the adjective "ethical" used in the second of these senses. Space precludes detailed examination of the answers; but I note that Mr. Steinman put in a word for C.F. medicines. Divergent replies were given to the question whether hospital and retail pharmacists can play "any worth-while part" in pharmaceutical research. Mr. Fishburn and Professor Brindle (who was in the audience) agreed that research by either class, though not fundamental, might benefit the investigator.

This Year's Conference Meeting

The preliminary programme of this years' British Pharmaceutical Conference meeting (p. 358) will, I assume, be read attentively by everyone who intends to be present. While the events seem to have been planned to suit all tastes, I have a doubt about the choice of the venue. To anyone with a sense of history, the charm of Oxford is so compelling that it dwarfs other impressions, and a visitor may find that an effort is required to remember lesser matters which may need attention. About twenty years ago I took a graduate of another university for a look at some Oxford buildings: after a few hours a comment to this effect was made: "I should never be able to do any work in this wonderful city." Books on the University, from Sir Charles Mallett's history downwards, are numerous. One of the latest, a delightful blend of gaiety and seriousness, is "To Teach the Senators Wisdom," by Mr. C. J. S. Masterman. It will be of interest to find out what effect the mental climate of the surroundings has on attendances in the Science Section of the Conference. Among strong counter attractions is the Botanic Garden, one of the oldest in the world.

Apparatus and Machinery Shown

An extensive selection of apparatus and machinery is the main feature of your issue of April 10, and the accompanying illustrations are an invaluable aid to exploring the details of the text. Manufacturers with a large output may have their own sources of information on new machines and adjuncts; but retailers and wholesalers with limited connections cannot fail to find your pages worth careful examination. It will not benefit owners of such firms or companies to glance casually through your concise descriptions with a predetermined idea that the descriptions do not concern them. So soon as expeditious handling of quantities of material for putting into stock becomes a consideration, so soon is a nineteenth-century equipment of apparatus in a pharmacy or laboratory seen to be a delaying factor. Again, it may happen that a successful retailer is seeking a way to work up a wholesale trade, for which he feels reasonably certain that there is an opening in his locality. A set of appliances suited to the kind of trade he has been carrying on will not take him far. Your Annual Machinery Number is a welcome addition to current information on this subject and a careful study of its pages may prove rewarding to both retailer and wholesaler.

Pharmacy Students Confer

"MODERN TRENDS IN PHARMACY" THEME

THE twelfth conference of the British Pharmaceutical Students' Association, held in London, April 6-10, had the general theme "Modern Trends in Pharmacy."

At the opening session, at which the president (Mr. S. K. Agrawal) was in the chair, delegates were welcomed by MR. K. H. SINDELL (president of the students' union, London University school of pharmacy). MR. AGRAWAL in his presidential address, said that twelve years was not a long time for an organisation to have been in existence but during those twelve years there had been a great increase in the membership and in the scope of the activities of the Association. Members could take pride in the building up of the B.P.S.A. Of the many people who had contributed to the progress of the Association one was Professor H. Berry (dean of the school of pharmacy, University of London) whom he called upon to address the conference.

PROFESSOR BERRY said that the present generation had been born in a period when the rate of change was much faster than before. There were signs of even greater acceleration. Sir Henry Tizard had once stressed that the present increased activity signalised a start in applying science to



ASIATIC STUDENTS TRAINING IN LONDON: Five students training in Britain under the Colombo Plan photographed at a reception held in London recently. From left to right in the picture the students are Messrs. N. Jayatunge, Ceylon, and Gurdas Singh, India; Miss M. A. E. Perera, Ceylon; Messrs. A. M. M. Khan, Pakistan; and S. M. Ramanathan, Ceylon.

empirical needs. The British Pharmacopœia showed something of the advances that had been made. In producing an edition of the B.P. it was necessary to select drugs for inclusion that were typical representatives of a class. To include every reputable drug was not possible.

Development had accentuated the need for specialisation in medicine and pharmacy. For the general practitioner to understand all modern drugs was impossible. Many drugs introduced to medical students became obsolete within a few years. At one time the medical profession had frowned upon the idea of pharmacists possessing physiological and pharmacological knowledge. Today the medical schools approved of the inclusion of those subjects in the pharmacy syllabus.

In retail pharmacy, factors such as the introduction of biological standardisation, the appearance of standard tablets and injections, which the retailer preferred to buy rather than prepare himself, and of proprietary medicines, had caused the art of dispensing to be practised less and less. However, retail pharmacists still had a need for specialised knowledge, so that they could guide the public and act in an advisory capacity to the physicians. As a means of training, apprenticeship in retail pharmacy had lost its value. The art of pharmacy was being transferred to the laboratories of manufacturing houses. There, problems of production had to be the responsibility of a pharmacist with a knowledge of the principles of engineering. For dealing with the question of action and uses a pharmacologist was needed. Formulation and packaging had diverted the art of pharmacy from the retail establishments. A pharmacist working in those fields had to devise preparations sound from both the economic and the therapeutic points of view, and capable of remaining stable in all climates. The storage factor was important to the wholesaler. In the field of packaging it is necessary to design packs that would stand up to constant variations in temperature. A knowledge of the properties of glass and of other materials used in packaging was necessary.

Professor Berry advised students who intended to specialise in pharmacology to study the subject thoroughly. A first class honours degree and postgraduate study were necessary if the pharmaceutical pharmacologist, working with pharmacologists having a medical background, was not to be regarded as a technician.

The work of a hospital pharmacist was becoming that of an authority on drugs and an adviser to the medical profession. The hospital pharmacist must be able to assess claims made for a new drug and to improvise new preparations for experimental treatment. In a teaching hospital the chief pharmacist should have a status as a teacher equal to that of his medical colleagues. He should also have facilities for research.

At a session on April 7, with Mr. A. M. Barrett (secretary of the B.P.S.A.) in the chair, SIR HUGH LINSTEAD, M.P. (a secretary of the Pharmaceutical Society) gave an address on "Politics and the Future of Pharmacy." He reviewed briefly the emergence of pharmacy as a separate profession, pointing out that the various Pharmacy Acts had controlled the sale of poisons but had failed to declare precisely what a pharmacist's job was. In the 1920's and 1930's a major question had been "How may dispensing be separated from prescribing?". The National Health Service Act had solved that problem for pharmacy. Doctors now no longer found it worth while to keep dispensaries to cater for private patients only. There were only two problems today that had been in existence fifty years ago. These were the questions of assistants and of pharmacists in the Forces. The present view of the profession was that it was unwise to give any recognition to assistants. There were some slight signs that a more enlightened view of the rôle of the pharmacist was being taken in Service departments.

The profession of pharmacy could expect strong influences from the universities and from the National Health Service. As the universities were actively interested in pharmacy they were bound to affect it. There were posts which could be occupied by graduates in pharmacy without the latter becoming registered as members of the Society. It was therefore necessary that the good relations should be maintained between the Society and the universities. In France there was a cleavage between the profession and the universities. For example, the universities did not restrict entrants to pharmaceutical study. Consequently more people were being trained than the profession needed.

Today the average practising pharmacist would say that he was not dissatisfied with his conditions under the National Health Service. The Act implied, first, that limited money was available for unlimited service; and secondly that there was direct ministerial responsibility for the services rendered. That meant that the Minister of Health must try to "spread the money as thinly as possible over his slice of bread," and already he was taking steps to impose economy in prescribing. If employment continued at its present high level the Minister of Health, acting perhaps under pressure from the Minister of Labour, might interest himself in staffs employed in shops. Any Minister with an eye to economy and man-power might be anxious to see that a profession did not raise its academic standard. There was no indication of such a step generally. Nevertheless there had recently been proposed a "Royal College of Technology." If that plan had gone forward the Government would have had in their hands a means of curbing professional bodies that sought to raise their standards. The Government could have made it possible for a person holding the diploma of such a College to be employed in nationalised industries, and the standard of that



MANCUNIANS AT GREENWICH : Students from the pharmacy department, Manchester University, photographed in the grounds of the Royal Naval Hospital, Greenwich, during a recent visit to London. *Photo by Dr. J. E. Carless of the University staff*

diploma could be set lower than that of the corresponding professional body.

If pharmacists wanted to maintain the essential feature of British pharmacy—the existence of individual contractors—it was necessary that the standards in retail shops should be kept at a high level, otherwise there was a danger that more State dispensaries would be set up. He knew that proposals had been made for registration for shops that sold drugs as well as those that sold foods, and that both should be subjeet to inspection. If that course were adopted, inspection ought to be done through the Pharmaceutical Society.

"Pharmacology—the Future," was the title of an address by DR. G. A. H. BUTTLE (professor of pharmacology at the school of pharmacy, University of London) on April 8, Mr. Barrett presiding. Professor Buttle said that in ancient times drugs had been assessed by the response of patients to them, but the real advances had been in the modern field of experimental laboratory work. The subject was developing so fast that it was not easy to keep traek of it. Many important drugs were discovered each year and as the clinicians found it difficult to follow the advances, pharmacists were more and more having to advise doctors upon the use of drugs and the possible diffieulties associated with their administration. The pharmacist was important also because fewer and fewer medical nien were specialising in pharmacology.

Because of the newness of the subject, pharmacy schools had not yet sufficiently developed their facilities for teaching pharmacology, and research was difficult both in opportunity and expense. The value of pharmacists as advisers to the doctor was particularly noticeable in the hospitals. Some drugs were introduced to the market before their pharmacology had been fully worked out. The pharmacological worker had not only to examine a new drug with an eye to its uses, but also had to perform toxicity tests. In America in recent years an elixir of sulphanilamide had been marketed in which the drug was dissolved in the solvent diethylene glycol. No toxieity tests on the solvent had been performed, and the result had been that more than 100 people had died from taking the preparation.

Much research in pharmacology was done by manufacturing houses, and in America the manufacturers were ahead of the university departments in some respects. Research in a manufacturer's laboratory was directed towards producing a remedy within a short time. That was important work but he considered that there was another kind of research that was more important. An example was cancer research, where the line of work was not fruitful within a short time. Acute infections had been brought under control, but there were, as yet, no specifie therapeutic agents for treating certain virus diseases (influenza, poliomyelitis).

Unfortunately there was some abuse of drugs. Barbiturates were sometimes given for long periods without proper control. Antibiotics, if used excessively, could produce resistant strains and organisms. The possibility of introducing legislation to curb such abuses should, he thought, be looked into. The future of pharmacology would be bound up in the close collaboration between the pharmaeologist, the clinician and the chemist. The pharmacy student had the advantage over the medical student in having a sound knowledge of chemistry. For pharmacologieal research, a combined knowledge of pharmacology and chemistry was extremely valuable. A pharmacologist with little chemical knowledge might want to have impossible compounds prepared for use in his experiments.

At a business meeting held on April 10 the following officers were elected: *President,* Mr. S. Gottlieb (Sunderland Technical College); *Secretary-general,* Mr. G. Simmonds (Chelsea Polytechnic); and *Treasurer,* Mr. J. N. T. Gilbert (School of Pharmacy, University of London).

Conference Dinner

At the conferenee dinner in London on April 8, the president (Mr. Agrawal) in the chair, the toast, "The British Pharmaceutical Students' Association," was proposed by MR. S. R. CURTIS (secretary, School of Pharmacy, University of London). In his reply MR. AGRAWAL spoke of the Association's gratitude to its pioneers, including Messrs. J. Shinner, J. A. Box and S. J. Relph, and acknowledged "generous financial support" from the British pharmaceutical industry. "The Guests and the Pharmaceutical Society" was proposed by MR. A. M. BARRETT, MR. D. LEWIS (an official of the Society) replying. Mr. Lewis said the Society had achieved a unique place in world pharmacy, being the registering and diseiplinary body for pharmacists and being charged with enforcing the laws governing the sale of poisons. The toast, "The Students' Union of the School of Pharmacy," was proposed by MR. B. J. THOMAS, MR. J. F. ESSENHIGH replying.



ENGLAND VISIT : Students from the School of Pharmacy, University of Amsterdam, examining some of the rare books in the Wellcome Historical Medical Library during a visit to the Wellcome Research Institution and Laboratories, London, on March 31.

MARRIAGE

MARKS — FULLER. — At Holy Cross Episcopal Church, Edinburgh, on March 29, Alan R. H. Marks, Halstead, Essex, to Joyce Agnes Fuller, M.P.S., 22 Woodside Avenue, Beaconsfield. Bucks.

DEATHS

CARNEGIE. — At Whitstable, on April 7, Mr. Robert Beaton Carnegie, aged seventy-eight. Mr. Carnegie was chairman of Carnegies of Welwyn, Ltd. He was the son of a seamen's missionary whose work among sailors brought the family to London in 1888. Mr. Carnegie studied chemistry at the People's Palace, Mile End Road, London, and spent all his life in pharmaceutical trade, first with a London and Edinburgh firm of manufacturing chemists, where he became manager. In 1911, with two other brothers, he started his own business in London. The present business, in which he maintained an active interest until his death, was started in Welwyn Garden City in 1936. Wishing to carry on his father's work, he opened a mission hall in Whitstable in 1921. Mr. Carnegie served on many committees for the propagation of Christian missionary work. He is survived by his widow and two sons.

FRASER.—At the Royal Northern Infirmary, Inverness, on March 18, Mr. Donald Fraser, M.P.S., 44 Island Bank Road, Inverness. Mr. Fraser qualified in 1920 and was formerly in business at 1 High Street, Inverness, and latterly, until his recent retirement, with T. Mackenzie & Co., Inverness.

LUMIERE.—At his home in Lyons, on April 10, Mr. Auguste Lumière, aged ninety-one. Mr. Lumière was well known for his research on cancer and tuberculosis. He and his brother Louis, who died in 1948, were both closely concerned with the early commercial development of cinematography. Auguste was especially interested in the use of photography in medical research. In 1896 he founded an experimental physiological laboratory at Lyons in which he developed numerous new medical preparations; and on the outbreak of the 1914-18 war he set up and ran at his own expense a mass radiography service in Lyons. He was responsible for the introduction of non-adhesive wound dressings and the employment of sodium persulphate in the treatment of tetanus.

PEDAVITZ. — On March 29, Mr. Hyman Bernard Pedavitz, M.P.S., 12 Caroline Street, Salford, 7, Lancs, aged thirty-five.

SCRUTON.—At his home in York, on April 7, Mr. Alfred Scruton, aged eighty-five. Mr. Scruton was chairman of Raimes & Co., Ltd., wholesale druggists, York. He had been associated with the company and its forerunner for more than seventy years. He was the son of Mr. Samuel Scruton, a former magistrate of York and the original principal of the firm. Both he and his father were freemen of York. Mr. Scruton joined the firm as an apprentice. When the business was converted into a limited company in 1935, he was appointed its first managing director. He retired from that position in 1945 when he became chairman of the company. He was one of the foundation members of the Drug Club, forerunner of the Wholesale Drug Trade Association, now the Association of British Pharmaceutical Industry. Mr. Scruton is survived by his widow and two sons.

WAIN.—At his home, the Grange, Ripley, Derbys, on April 10, Mr. William Spensley Wain, M.P.S., aged eighty-six. Until his retirement a year ago, Mr. Wain was in business as a chemist in High Street, Ripley. Born in Middlesbrough, he was resident in Ripley for more than sixty years. He was a director of the Ripley Lace Co., Ltd.

PERSONALITIES

MR. ALAN F. BROWNLOW, who has accepted a unanimous invitation to become the next mayor of Stratford-on-Avon, qualified in 1923. He took over a business in Bridge Street, Stratford-on-Avon, in 1926.

MR. DON KISSANE, son of Mr. J. P. Kissane (immediate past-president of the Pharmaceutical Society of Ireland) captained the Blackrock College rugby team which recently won the rugby schools cup.

MISS L. I. ANDERSON, M.P.S., who was, in 1950, the first woman president of the Blackpool Branch of the Pharmaceutical Society, recently gave a lecture on "Women in Pharmacy" to the Blackpool branch of the Electrical Association for Women.

MRS. O. B. ADAMS, first woman president of the Plymouth Branch of the Pharmaceutical Society (see p. 391), has been a member of the Society since 1936, and moved to Plymouth from London in 1950. She is a former secretary of the Plymouth Branch and has been a member of the committee of that Branch since 1951. While in London she was a member of the National Association of Women Pharmacists.

MR. V. G. STOCKWELL, M.P.S., who is retiring after twenty-eight years in business as a chemist in High Street, Bridge, Canterbury, Kent, was presented with a clock and cheque on behalf of the village. Mr. Stockwell has served for some years on the parish council and represented the parish on the Bridge-Dean Rural District Council. He has been a churchwarden for a considerable time.

BUSINESS CHANGES

Appointments

DELAVELLE (G.B.), LTD., have appointed the following representatives:—Mr. F. Milner, Martellus, Park Road, Mickleover, Derby (telephone: Derby 53237) in the East Midlands area, and Mr. J. Evans, 22 Tamar Avenue, Taunton, Somerset (telephone: Taunton 3681) in the West Country area.

WILLIAM FREEMAN & CO., LTD., have appointed Mr. C. E. Mugridge, 22 Ash Grove, Maidstone, Kent, their representative in Surrey, Sussex and Kent.

LEGAL REPORTS

Forged Prescriptions.—At East Sussex quarter sessions, Lewes, recently, John Joseph Gorman pleaded guilty to six charges of forging prescriptions or obtaining tablets with intent to defraud. A detective-sergeant said that Gorman had obtained a total of 3,000 tablets by filling in blank prescription forms taken from a doctor's house.

Chemists' Premises Entered.—At the London Sessions, on April 2, Richard Alan Ross, Blackheath, was sentenced to three years' imprisonment for breaking and entering the premises of William Fox & Sons, Ltd., chemists, Well Street, E.9, and stealing lipsticks and other articles. Thomas Block, Stepney, who pleaded guilty with him, received eighteen months and Wilfred Schwarz nine months.

Anæsthetics Appeal Unsuccessful.—The Court of Appeal, London, on April 8 dismissed appeals arising from verdicts given in actions brought by two men who became paralysed below the waist after they had been given Nupercaine spinal anæsthetic in Chesterfield Royal Hospital in 1947 (see *C. & D.*, 1953. II. 439 and 511). Lord Justice Somervell said that the question was whether the percolation of phenol solution into ampoules was caused by the negligence of the defendants or either of them. Dr. Graham, who appreciated the possibility of cracks in ampoules, had said that he examined each one carefully and did not believe he could have missed a crack. The judge accepted that he made a careful examination. The finding that the hospital authorities and Dr. Graham were not negligent was justified. The fact that something went wrong was not proof of negligence. There were obvious risks in surgical operations. Lord Justice Denning said that no one could be unmoved by the disaster to the two men. The facts had called for an explanation by the hospital authorities and from Dr. Graham, and they had given one. Dr. Graham had sought to escape the danger of infection by disinfecting the ampoules. In escaping that known danger he had unfortunately run into another. He did not know that there could be undetectable cracks, but it was not negligent for him at that time not to know it. The two men had suffered such terrible consequences that there was a natural feeling that they should be compensated, but the court would be doing a disservice to the community if they were to impose liability on hospitals and doctors for everything that went wrong. Doctors would be led to think more of their own safety than of the good of their patients. Initiative would be stifled and confidence shaken. A proper sense of proportion required that regard should be had to the conditions in which hospitals and doctors had to work. "We must insist on due care for the patient at every point, but we must not condemn as negligence that which is only a misadventure." Lord Justice Morris agreed that the appeals failed. Leave to appeal to the House of Lords was refused.

COMPANY NEWS

Previous year's figures in parentheses

JOHN KNIGHT, LTD.—Available net profit for 1953 was £167,487 (£70,584) after U.K. tax, £206,332 (£130,192). Ordinary dividend, 20 per cent. (5 per cent.), free of tax.

F. W. HAMPSHIRE, LTD.—Group trading profit to December 5, 1953, was £169,256 (£161,770). Taxation, £66,020 (£60,735); to balance sheet, £73,813 (£92,305). Dividend on ordinary capital, 16⅔ per cent. (unchanged).

CECIL SWANN, LTD.—Mr. Cecil G. H. Swann (chairman) has relinquished his interests in the company and has retired from the board. Mr. Leslie B. Singleton (managing director) has acquired Mr. Swann's interests in the business.

J. & E. ATKINSON, LTD.—Profit for 1953 was £76,340 (£55,109) less tax, £49,934 (£35,518). Ordinary dividend, 7½ per cent., tax free (same). Mr. D. E. Budgett-Meakin has been appointed chairman and managing director.

AYRTON SAUNDERS & CO., LTD.—Consolidated trading profit for 1953 was £73,080 (£93,410); net profit, before taxation, £40,490 (£65,810); taxation, £24,079 (£41,537). Dividend recommended on ordinary shares, 10 per cent.

CUSSONS, SONS & CO., LTD.—Net profit for 1953 after all charges including taxation, was £124,131 (£91,765). Taxation, £179,640 (£139,850). Final dividend, 21 per cent. (20 per cent.) making 35 per cent. (32 per cent.) less tax, for the year, plus capital distribution 6 per cent., free of tax (nil) from surplus arising from liquidation of Cussons (South Africa), Pty.

EVANS MEDICAL SUPPLIES, LTD.—The chairman's statement accompanying the accounts for 1953 (published *C. & D.*, April 3, p. 338) attributes the increase in trading profit to an increase in sales, a diminution of stock losses which had to be provided in the previous year and a saving achieved on standard costs. On the National Health Service, the chairman (Mr. I. Fergusson), trusts the Government in seeking economies will not impoverish the pharmaceutical industry in such a way as to jeopardise the export trade for, he says, like other industries it relies on a stable home trade for its foundation. The new process for coating tablets evolved by the company's staff (*C. & D.*, February 13, p. 153) has attracted inquiries from major pharmaceutical interests in the United States, Europe and elsewhere.

New Companies

P.C. = Private Company; R.O. = Registered Office

POUNDGATE PRODUCTS, LTD. (P.C.).—Capital £100. To carry on the business of dealers in medicines, drugs and chemical products, etc. Solicitors: Collyer-Bristow & Co., 4 Bedford Row, London, W.C.1.

CLAUDE BENTON, LTD. (P.C.)—Capital £6,000. To carry on the business of chemists, etc. Directors: Claude O. M. Benton, M.P.S., and Frances C. Benton. R.O.: 13A White Lion Street, Norwich.

RADCLIFFES CHEMISTS, LTD. (P.C.).—Capital £500. To carry on the business of manufacturers of and dealers in chemicals, drugs, medicines, etc. Directors: Ernest Radcliffe, M.P.S., and Jean T. Radcliffe. R.O.: 74 Shaw Road, Oldham.

R. COCKING & SON (CHEMISTS), LTD. (P.C.).—Capital £1,000. To carry on the business of wholesale and retail chemists, etc. Directors: Doris M. Cocking, David K. Cocking and Cyril B. Snow, M.P.S. R.O.: 1 Park Parade, Locksbottom, Farnborough, Kent.

B. & P. LABORATORIES, LTD. (P.C.).—Capital £100. To carry on the business of manufacturers of and dealers in medicines and medicinal preparations, etc. Directors: Robert Pintus and Peter Briess. R.O.: 17 Stratford Place, London, W.1.

THE WEEK IN PARLIAMENT

By a Member of the Press Gallery, House of Commons

MRS. JEAN MANN asked the Secretary of State for Scotland on April 6 if surgeons in Scotland were fully informed about, and had accessible supplies of, anti-hæmoglobin serum. COMMANDER T. D. GALBRAITH (Joint Under-Secretary of State): Yes. I am, however, informed that fresh blood would usually be preferable to the serum.

Merchandise Marks Acts

MR. PETER THORNEYCROFT (President of the Board of Trade) told MR. S. T. SWINGLER on April 8 that he would not establish a section to deal with complaints of infringement of the Merchandise Marks Acts.

MR. W. D. CHAPMAN asked the president of the Board of Trade on April 8 what steps he had taken to secure evidence that certain medical and cosmetic preparations, recently exposed as worthless by the Birmingham city analyst, had been on sale in shops, and whether he would announce that proceedings were to be taken under the Merchandise Marks Act.

MR. PETER THORNEYCROFT (President of the Board of Trade): Those preparations do not appear to be on sale in shops but by mail. I am continuing my inquiries.

Stop Lists for Traders

MR. A. ROBENS asked the President of the Board of Trade on April 8 if he would specially refer to the Monopolies Commission the practice of some trade associations of putting traders upon a stop list. MR. PETER THORNEYCROFT replied that that practice fell within the scope of the inquiry that the Commission was conducting.

Hydrocortisone

MISS P. HORNSBY-SMITH (Parliamentary Secretary to the Ministry of Health) told MR. F. J. ERROL in a written answer on April 8 that production of hydrocortisone had only recently started in Britain. Supplies now available to hospitals receiving cortisone would be increased as the need arose.

Prescription Statistics

In a written answer to MR. A. BLENKINSOP on April 8, MISS P. HORNSBY-SMITH (Parliamentary Secretary to the Ministry of Health) gave the following information on the number (declared by chemists) and average cost (estimates obtained from sample) of prescriptions dispensed under the National Health Service in England and Wales:—

	Number of Prescriptions	Average cost per Prescription
1953		d
October	19,201,000	47.09
November	18,561,000	47.49
December	18,594,000	49.22
1954		
January	19,704,000	48.48
February	19,203,000	48.80

Hospital Doctors' Pay

In a written answer to MR. J. N. BROWNE on April 8, MR. IAIN MACLEOD (Minister of Health) gave details of increased pay announced for hospital medical staffs. The estimated cost will be about £3,250,000 a year.

Report on Myxomatosis

SIR THOMAS DUGDALE (Ministry of Agriculture) told MESSRS. E. WAKEFIELD and T. V. H. BEAMISH on April 9, in a written reply, that the recommendations of the Advisory Committee or myxomatosis had been accepted. The Committee advised that no attempt should be made to assist its spread or to introduce it into unaffected areas of the country. It should be allowed to run its natural course among wild rabbits, but every effort should be made to kill rabbits that survived outbreaks.

Health Services Debate

In a Lords debate on the Health Services on April 7, LORD MATHERS said that one possible economy that occurred to him was in respect of proprietary drugs and proprietary medicines and remedies. The amount of advertising that was done was, to those who did not know of it, almost unthinkable. He could not complain about the advertising. Most people wanted to sell their remedies. But doctors should be able to prescribe the equivalents of proprietary remedies. The difficulty, he knew, was to convince the patient that he was getting as good as what was so widely advertised.

In his reply, LORD MANCROFT said that the prescribing of proprietary medicines of the more expensive kind was in fact discouraged. Sometimes hospital pharmacists were advised by their medical staff to dispense non-proprietary equivalents without reference back to the physician.

In the House of Lords on April 6 the British Industries Fair (Guarantees and Grants) Bill was read a third time and passed. The Food and Drugs (Scotland) Bill was read a third time, passed and sent to the Commons.

TRADE NOTES

Competition Prize-winners.—Winners in a Lypsyl window-display prize competition organised by Pepsodent (Sales), Ltd., 449 London Road, Isleworth, Middlesex, are given on another page.

Discontinued.—Delay insulin AB, a product jointly of Allen & Hanburys, Ltd., London, E.1, and The British Drug Houses, Ltd., London, N.1, has been discontinued. No stocks remain.

Sole Distributors. — The Laleek beauty preparations manufactured by Adelaide Grey, Ltd., Old Bond Street, London, W.1, are distributed throughout the world by Thompson & Capper Wholesale, Ltd., Speke, Liverpool, 19.

Change of Pack. — Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, notify changes in packings and prices of Entramin capsules. The existing 200-mgm. are being replaced with 100-mgm. capsules.

Enlarged.—B.G.P. (Cosmetics), Ltd., 37 Chesham Place, London, S.W.1, have increased the size of the standard Lip-Cote pack to give more than double the quantity of the smaller handbag model introduced in 1953.

Colour Film Processing.—A new processing station for Pakolor film has been opened as the Jacolor Laboratory, 46 Woodford Road, Watford, Herts, by Associated British-Pathe, Ltd., Film House, Wardour Street, London, W.1. The telephone number is Watford 2110.

Combs in Display Cabinet. — The Langdale series of combs manufactured by John Dobson (Milnthorpe), Ltd. Bela Mill, Milnthorpe, Westmorland, are presented in a counter display cabinet containing 1 doz. each of 8½, 7 and 6-in. dressing combs, 5¾-in. bag comb and 5-in. pocket or bag combs (two patterns), in a variety of colours.

Distribution Change.—Bengué & Co., Ltd., Mount Pleasant, Alperton, Wembley, have taken over the manufacture and distribution of the Sulfarsenol products (Sulfarsenol brand sulpharsphenamine and pigmentum Sulfarsenol), both of which have hitherto been manufactured and distributed by Sulfarsenol Laboratories, Ltd., Mount Pleasant, Alperton.

Fluorine Compounds for Research.—Associated Fumigators, Ltd., 112 Victoria Dock Road, London, E.16, have available laboratory quantities of a number of fluorine compounds for insecticidal, pesticidal and chemical research. The list includes fluoroacetamide, sodium fluoroacetate, fluoroacetanilide and fluoro-o-anisidide. They hope shortly to add fluoroacetic acid, fluoroacetonitrile, fluoroacctyl chloride and fluoroacetmethylamide.

Specialities of an American Company.—Riker Laboratories, Ltd., Morley Street, Loughborough, Leics, have been appointed distributors in the United Kingdom and Eire for the Wm. S. Merrell Co. of America. The first of the company's products to be introduced are Melbentyl and Merbentyl with phenobarbitone. Each tablet of Merbentyl contains 10 mgm. of diethylaminocarbethoxybicyclohexyl hydrochloride. Merbentyl with phenobarbitone contains, in addition, 15 mgm. of phenobarbitone. Merbentyl is a parasympatholytic agent with neurotropic and musculotropic actions upon smooth muscle of the gastro-intestinal and genito-urinary tracts.

All-the-year-round Photography. — Focal point in a photographic exhibition opened on April 8 at Selfridges, Ltd., Oxford Street, London, W.1, is a scheme to promote all-the-year-round photography by encouraging interest in flash equipment. Of two small "studios" provided, one is arranged with contemporary furniture, and one as a nursery with play-pen and toys. Flash attachments are fitted to popular types of box cameras, and customers, particularly women, are invited to take four flash pictures of their chosen subject using the cameras provided and films and flash-bulbs supplied free. The pictures are developed, printed and posted to the customer free of charge. Elsewhere in the exhibition popular cameras and other apparatus are on show.

"Pharmaceutical" Calcium Carbonates. — A new range of precipitated calcium carbonates (P.C.C.) has been introduced by John & E. Sturge, Ltd., Wheeleys Road, Birmingham, including a "pharmaceutical" grade to be known as Sturcal-X. The new grade is an addition to the Sturcal range, in which letter suffixes denote bulking properties, apparent densities, particle shapes. and size distributions. The normal grades are processed so that 99·7 per cent. passes through a 200-mesh sieve on a wet screen test. With the new Sturcal-X, the particles retained on the sieve are reduced from approximately 0·3 per cent. to 0·03 per cent. For industrial use the new range includes Calofort, an ultrafine P.C.C., coated with 3 per cent. stearic acid; Calopake, a high-opacity, fine, calcitic P.C.C. available in coated or uncoated grades; and the Calofil grades, which have a low oil-absorption and low relative viscosities, and are also available in coated and in uncoated varieties.

BONUS OFFERS

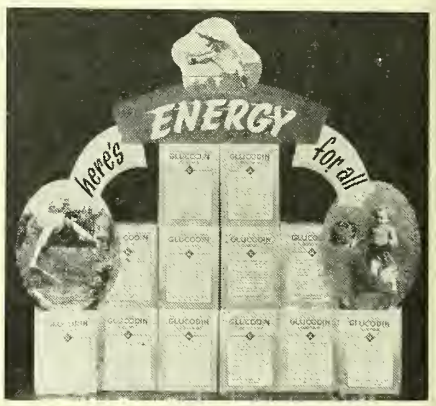
FOR a period of one month only, BAYER PRODUCTS, LTD., Africa House, Kingsway, London, W.C.2, are giving a bonus of 1 doz. 6-oz. bottles of Roccal antiseptic on orders for twenty-four 6-oz. and three 16-oz. bottles. Display material and "hand-out" literature for customers is also



being sent. The bonus parcel will be dispatched direct, carriage paid, but charged through wholesalers.

Until June 1, CAMILATONE, LTD., Edgware Road, London, N.W.9, are sending six tubes of their Camilatone synthetic henna cream free with orders for 2 doz. or more.

GLAXO LABORATORIES, LTD., Greenford, Middlesex, announce that Glucodin is being offered on bonus terms to registered retail pharmacies for the period April 12 to May 8 inclusive. Chemists will receive six free cartons in every 4 doz. ordered during that period. Special show material, stressing the use of Glucodin for adding energy and sweetness to summer drinks, has been prepared to coincide with the offer; each bonus parcel contains two crowners, and those chemists who participate will also receive a parcel containing a three-colour display-piece, two additional coloured



crowners, and a supply of leaflets for distribution to customers.

Until April 30, two free cartons of Sandil almond friction skin cleanser are being included in every doz. ordered. The makers are SANDIL, LTD., 15 Whitehall, London, S.W.1.

The latest date for delivery of Flit products to qualify for the bonus offered by the manufacturers, STEMCO, LTD., 128 Albert Street, London, N.W.1 (*C. & D.*, January 2, p. 2), is April 30.

With the co-operation of the wholesalers, EDWARD TAYLOR, LTD., Monton, Eccles, Manchester, are operating from April 5 to July 3 a bonus scheme under which chemists select their own bonus parcels from the whole range of the company's products. On orders value £10 or more there are a quantity discount of 5 per cent. and a further 5 per cent. discount for display. Two counter display-pieces are available.

The makers of Esoban, SOUTHON LABORATORIES, LTD., 84 Upper Richmond Road, London, S.W.15, announce that a special bonus of thirteen to the doz. is now available on the standard and handy-pack sizes of Esoban de luxe cream of calamine. The bonus is offered on minimum orders of three doz. of either size.

NEW PRODUCTS AND PACKS

"Crystal-clear" Hair Dressing.—Trugel, a new and "crystal-clear" hair dressing for men introduced by E. Griffiths Hughes, Ltd., Manchester, is being given a big send-off in the national Press on April 24. The product, a gel, is issued in a cartoned collapsible tube.

"Muted" Powder Shades.—For the woman who is neither blond, titian nor brunette, Coty (England), Ltd., 3 Stratford Place, London, W.1, have introduced, in their Airspun range, three "subtle, muted" powder shades: muted beige, muted rose and muted sun. The new shades are available in five perfumes.

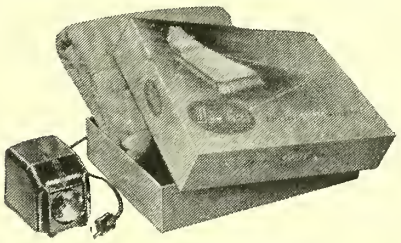
Sunglasses with Unbreakable Frames. The Nylospex hingeless sunglasses, by Marketad, Ltd., and distributed to pharmacists by S. Maw, Son & Sons, Ltd., Barnet, Herts, have nylon frames made to a hingeless design, with Crookes B_2 lenses. They can be considerably distorted and still return to their original shape. It is possible to bend the side arms through practically 360° without damage. Even with their lenses, the glasses weigh less than 1 oz. per pair, and the design ensures a comfortable close fit, specially important for people engaged in golf or tennis, where the normal frames tend to slip. Nylospex are packed twelve to a counter "dispenser," which incorporates its own showcard in the cut-out lid. The "dispenser" contains four pairs of sunglasses each of three colours (natural, deep maroon and Hyacinth). Each pair is individually packed in an envelope.



Waterproof Sheets.—Grovewell, Ltd., 656 Forest Road, Walthamstow, London, E.17, are the manufacturers of the Puck lightweight waterproof sheet for cots, carry-cots and prams. The sheet is made from polythene and is thin, smooth and pliable, yet strong enough to withstand everyday wear. Eyelet holes at each corner enable the sheet to be secured in position. The size of the sheet is 30 x 21 in.

Lavender Bath Luxuries. — Morny, Ltd., 22 Wadsworth Road, Perivale, Greenford, Middlesex, have made available a "lavender flowers" series comprising toilet and bath soaps, talcum powder, bath salts tablets, bath essence and dusting powder, solid and liquid brilliantines, and lavender flowers extract. Messrs. Morny also introduced recently a new 2-oz. bottle of French Fern after-shaving lotion.

A New Electric Blanket. — David Griffin, Ltd., Wimborne Road, Poole, Dorset, are manufacturers of the Dee-Gee electric safety blanket, which is issued by the makers with a twelve-months' guarantee of satisfactory service. A control unit provides three temperatures and an "off" position, but full mains voltage does not enter the blanket, the maximum internal voltage being 12. The blanket may be washed in the ordinary way and folded or rolled to squeeze out surplus water, but it is especially emphasised that it must not be twisted or "screwed." The material is a pure wool velour cloth, fast dyed and guaranteed mothproof. A 60 x 36 in. size is issued in pastel shades of pink, blue and biscuit for use on double or single beds. A 36 x 19 in. size, for use in a cot, pram or child's bed, or as a travelling wrap for baby, is available in pink and blue shades only.



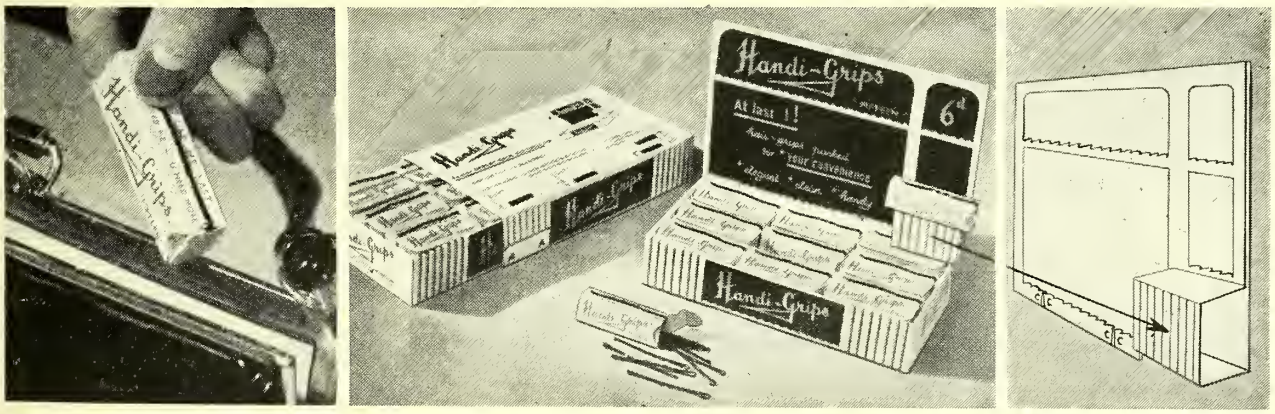
"HABERDASHERY" OR TOILET REQUISITE?

An industrial designer looks at the hair-grip

WHERE does a woman prefer to buy her hair grips? The makers, it would appear, have always assumed that she likes to buy them in the haberdashery department of a drapery store, and mounted on a card like a typical haberdashery item. A woman designer who started asking questions of her friends found that the matter was quite otherwise. Many women she questioned disliked having to make a special visit to a haberdashery department — often tucked away at the back of a large store—for what they looked upon as essentially a toilet requisite (it is obviously not an adjunct to dressmaking). None showed any affection for the card of four or more grips usually offered to the intending purchaser. Having made her discovery, the designer set about devising a presentation that really appealed to women, which they could buy at a pharmacy with other toiletries, and which the chemist would regard as stock in keeping with his other goods. The result of her efforts is to be seen in the Handi-grips illustrated, which are issued by Hand-grips, 19 Minera Mews, London, S.W.1. The grips themselves are of spring-tempered steel and give a firm hold, light in weight to reduce still further any tendency to fall out, and well lacquered. The pack presents a practical quantity (fifteen grips, sufficient for a hair setting) in a box no larger than a lipstick, and strong enough to stand up to buffeting in a handbag, yet elegant (in gold and turquoise blue). The outer contains ¼ gross boxes and is itself a miniature masterpiece of design.

Display Outer

A "sleeve" slides off the box. When flattened it notches into the box to form a display back, but with mounting for a single box of grips. By that means, not only is the single pack given a solus display, but the outer is given that "one-gone" look without which it is often difficult to persuade a woman to pick up an article and examine it. Handi-grips are in two varieties only: black and brown.



Left: A pack the size of a lipstick. Centre: Display outer as it arrives and as set up for display. Right: Mounting for single box of grips.

BRITISH PHARMACEUTICAL INDUSTRY

Association's annual meeting and dinner

THE annual meeting of the Association of British Pharmaceutical Industry, held in London on April 7, was attended by 132 representatives of member companies, the president of the Association (Mr. C. L. Saul) in the chair. Names of successful candidates in the Council election were announced as follows:—Messrs. D. Rainy Brown (J. F. Macfarlan & Co., Ltd.); W. M. Cox (Herbert Ferryman, Ltd.); G. A. Nixon (Ayrton, Saunders & Co., Ltd.); C. W. Robinson (Evans Medical Supplies, Ltd.); and L. D. Smith (Sangers, Ltd.).

The annual report was fully discussed, particularly the sections dealing with the investigation by the Ministry of Health into the earnings of secondary manufacturers and wholesale distributors of drugs used in the National Health Service; pharmaceutical exports; law and regulations; and the International Pharmacopœia.

Annual Dinner

The record number of 347 guests and representatives of member firms attended the annual dinner the same evening.

MISS P. HORNSBY-SMITH, M.P. (Parliamentary Secretary, Ministry of Health) proposing "The British Pharmaceutical Industry," said that the industry reflected the initiative, science, enterprise and skill so often found in British medicine as in any scientific enterprise to which this country applied itself. The several hundred members of the Association showed, particularly those that had vast research enterprises, that they had a standard in which they and the Ministry of Health could take pride. It was vital that the contribution the industry made to the country's export trade should be sustained. In that work it had maintained in bulk, if not in cash return, the high level of exports of which it had been justly proud since the war. The lessening of currency return was not so much due to exporting less as to arrangements by which many companies were making up and distributing on the spot with branch firms abroad. That meant exporting in bulk at a much cheaper rate than if the final bulk for the customer were packed within these shores.

In world markets, the keenest competitor was a rehabilitated and resurrected Germany, determined to win back, without the obligations and penalties of a defence programme on her shoulders, those markets.

Miss Hornsby-Smith said she would like to say, on behalf of the Minister (Mr. Iain Macleod), how grateful they were for the unfailing co-operation they had had from the industry in the work which they had endeavoured to do during the past four difficult years. There had been, under both the previous and the present Ministers, inquiries as to cost, calls for economy, and demands which a few might have resented, but most, as practical taxpaying industrialists, had recognised were necessary if the Government was to do its duty to Parliament, to the taxpayer, and to the consumer. Other departments of the Health Service had suffered more than the pharmaceutical industry at the hands of the Public Accounts Committee, and probably rightly so. She knew well that the prescription side of the Health Service accounted for only perhaps £35 millions out of a total bill of £400 millions. The biggest single item in the £280 millions of the hospital service was virtually outside the control of the Minister because it was wages, salaries, and fees and they were negotiated by the various Whitley Committees. She confessed that the responsibility lay in many cases with the general practitioner who had the last word in saying what should go on the prescription. He could make the biggest single contribution to economy in prescribing. She could not help thinking that such abuse and extravagance as there was lay not in the highly expensive drugs, which were vital in particular and limited cases, but in the over-prescribing of the small common article—the cotton wool, the lint and the like, where the bill was small, and where it was impossible to have a sufficient army of inspectors to investigate. The Minstry's mandate went no further than providing for the consumer and the Health Service the drugs specified by the practitioner at an economic price.

Replying to Miss Hornsby-Smith and proposing "The Guests," MR. C. L. SAUL (president of the Association) expressed appreciation of the tribute that had been paid by Miss Hornsby-Smith to the research activities of the pharmaceutical industry. The State was now virtually the only customer in this country for medical prescription products that were the results of research and development by the industry. It seemed only reasonable that the State should make its fair contribution, indirectly through N.H.S. prices, to the cost of those activities. Otherwise, this country would become more and more dependent upon manufacturers overseas for supplies of important drugs, to the detriment of British prestige, the export trade, and the Nation's balance of payments. Mr. Saul emphasised the importance of process research as well as fundamental research, pointing out that research into production processes had achieved dramatic reductions in the costs of, for example, insulin and penicillin. Had it not been possible to devote expenditure to that research, the cost of the drugs supplied by the industry to doctors, chemists and hospitals for N.H.S. purposes would today be far in excess of the present figure.

NORTHERN IRELAND HEALTH BOARD

Arrangements for more drug tests

AT a meeting of the Northern Ireland General Health Services Board on March 31 the Drug Pricing Committee considered the instruction from the Ministry of Health and Local Government that drug testing should cover not less than 10 per cent. and not more than 20 per cent. of chemists in all areas annually (see *C. & D.*, February 6, p. 121). The committee agreed to a 15 per cent. coverage, but pointed out that of all the tests investigated so far there was no evidence of deliberate substitution and only one case of short measure.

The committee also decided to ask the Medical Advisory Committee to inform doctors that there was no standard formula for glycerin, lemon and honey. The committee decided that chemists should be told that flavoured malt and cod-liver oil was not a B.P. preparation.

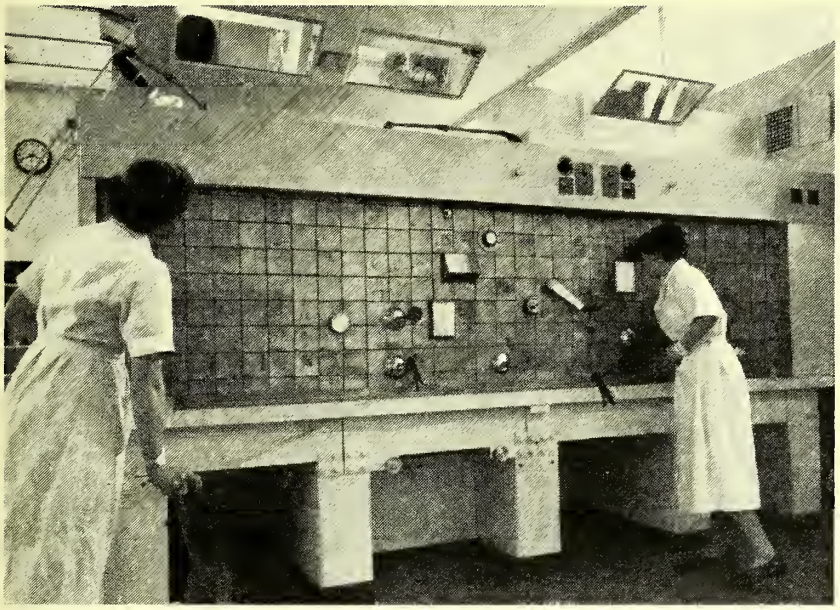
THE BOARD'S PHARMACIST reported that the Pricing Bureau had received from a chemist, in his January bundle of prescriptions, forms dated August, September, November and December, 1953. The chemist stated that some of the prescriptions had been telephoned to him by the doctor and that items were found to have been omitted when the forms were received. The delay was caused by the reference back to the doctor. The committee agreed that payment should be made, but that the chemist should be informed of their disapproval of the procedure. A subcommittee was appointed to decide on the details of the printing of the prescription code. The Board approved an interim payment to chemists for February of £122,288, together with £10,947 as the final payment for December 1953.

The Medical Advisory Committee was shown prescriptions written by two doctors which the staff had been unable to decipher. Apart from the possible danger to the patients, THE SECRETARY said, such prescriptions were not adequate vouchers in that it was impossible to decide whether the chemist had supplied what was ordered or if the prescriptions were written for patients on the doctors' lists. The chemists who dispensed the forms had written on them what they had dispensed. The committee agreed that the doctors concerned should be required to make immediate arrangements for their prescriptions to be written legibly. The names of Messrs. S. Bolton, 328 Newtownards Road, Belfast, H. H. Cowzer, 441 Ormeau Road, Belfast, and C. L. Gordon-Rattie, 192 Shore Road, Belfast, were added to the chemists' panel of the Services Committee.

Speaking of the successful results by the new punched-card system in operation in the Drug Pricing Department (see *C. & D.*, March 6, p. 237), Dame Dehra Parker (Minister of Health and Local Government) told the Board in Belfast on March 26 that the reduction in the time needed for full pricing had been a worthwhile improvement.

INCREASED PRODUCTION OF RADIOISOTOPES

Extensions at Amersham radiochemical centre



The dispensary for γ-emitting isotopes at the radiochemical centre at Amersham. *Crown Copyright.*

FOUR new buildings opened at the radiochemical centre at Amersham, Bucks, on April 8, by Sir Henry Dale are the first in Britain to have been specially designed for the production of radioactive isotopes. The demand for the isotopes has increased so far that it has become necessary to change from simple and sometimes directly manipulated laboratory production to specially constructed chemical plant housed in individual buildings. Eight such buildings are planned, four of which are already complete. Each building will be used for a group of similar processes.

Irradiation Technique

In one building are produced radioactive isotopes, mainly iodine and phosphorus, also some gold, iron and sulphur. For the production of radioactive iodine, used for treatment of cancer of the thyroid, tolurium is irradiated for two weeks in a silica container, and the radioactive iodine is then separated from the mass by dry distillation and absorbed into caustic soda solution. The tolurium is sent to one of the atomic production piles for irradiation, then returned to Amersham for distillation. The process is screened by walls of 4-in. lead in front and 18-in. concrete behind, and is watched by the operator through 6-in. lead glass windows, all handling being done by means of flexible tongs passed through the walls. Rubber sleeves on the inside protect those parts of the handles which are withdrawn outside the walls from contamination by radioactive substances when inside. The yield is sent to the dispensary, where it is assayed, checked for impurities and subdivided. Two or three curies of radioactive iodine are produced in two days.

Radioactive phosphorus, used for the treatment of polycythæmia vera, is produced in the same building, but since phosphorus is a β-emitting isotope, thinner protection is permissible, the process being screened behind 1-in. perspex. The target material is sulphur, which is irradiated for four weeks and the radioactive phosphorus separated by distilling off the sulphur. Advantages of the method are that the same target material may be used repeatedly and indefinitely, and no radioactive effluent is produced. The yield of radioactive phosphorus produced by ordinary laboratory methods in one week is obtained from the new plant in three hours.

Another building is used for the separation of fission products from the radioactive effluent from atomic piles. The waste solutions from which plutonium and uranium have been removed are sent down from factories in the North of England and from those solutions isotopes are extracted, the most important being Strontium-90 and Cæsium-137. Strontium-90, obtained by precipitation with nitric acid, is used in medicine for β-ray therapy, an interesting example of its use being in contact eye applicators for treatment of malignant growths in the eye. Strontium-90 is sandwiched between silver-foils, then between thin layers of acrylic resin.

In a building devoted to the preparation of radioactive carbon (C^{14}) the isotope is being produced in complex forms such as starches, sugars and proteins. Tobacco plants fed with radioactive carbon dioxide produce, by photosynthesis, radioactive sugars, while amino-acids are separated from proteins synthesised biologically by algæ fed on the isotope. Hens given radioactive amino-acids in their diet have produced radioactive egg albumen.

In the dispensary, stock solutions of isotopes are broken down into small amounts to meet consumer requirements. Manipulation is done under similar precautions to those maintained in the production laboratories. Observation is aided by the use of mirrors placed above each compartment. A sample of a given solution is assayed for potency, and the calculated volume dispensed by means of pipettes into small glass vials similar to those used for antibiotics. The vials are capped by machinery and sterilised if necessary by autoclaving in ordinary domestic pressure cookers at 115° C. for thirty minutes. The vials are then check calibrated and labelled. The dispensary handles up to 200 orders per week, varying from twenty microcuries to one curie.

Orders are sent by post, road, rail or air from the dispatch department, where they are packed in specially-designed containers, each package being tested by radiation counter to ensure compliance with transport regulations. During March over one thousand deliveries of radioactive materials were made from Amersham to buyers in Great Britain and in more than thirty countries overseas.

DEVELOPMENTS IN THE UNITED STATES

A PLANT that makes modern, continuous fat splitting practical for the smaller processor has been designed by the chemical plants division of the Blaw-Knox Co., Pittsburg, Pennsylvania. The plant has a capacity of 500 lb. an hour and provides for a high degree of split (up to 98 per cent.) coupled with low operating costs previously available only in larger units.

The Stauffer Chemical Co., Tacoma, Washington, has initiated commercial production of a new ammonium phosphate-sulphate fertiliser. The product is understood to be comparable to ammoniated superphosphate, except that it contains more nitrogen and does not suffer the reduction in water-soluble phosphoric-acid content that occurs when single superphosphate is ammoniated. About 90 per cent. of the available phosphoric acid in the new product is water-soluble. In the new process phosphate rock, sulphuric acid and ammonia are converted into a material containing 8 per cent. nitrogen and 12 per cent. phosphorus pentoxide. The process was originally developed in Italy by Rumianca, A.P.A., Turin.

Research by the U.S. Department of Agriculture has shown that chicks from casein-fed hens outgained chicks from hens on a high-protein soya bean ration as well as those on a low-protein corn diet. It is reported that the newly recognised growth factor is different from vitamin B_{12}.

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DALAY ADVERTISING: Starting in early April, DALAY will be advertised regularly and heavily in the high circulation women's journals so that DALAY is sure to be a top-line seller. One size only: 10 Tablets for 2s. 3d., incl. tax. Trade terms are 33⅓%, plus 10% extra for the display of the counter carton illustrated above.

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Published weekly at

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TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

Per Ardua ad Status Quo

If deadlock has been reached in discussions between the Royal Air Force and the Pharmaceutical Society (p. 406) on the status of pharmacy within that Service, at least the Society has stood firm on a principle of the utmost importance to the profession, to serving personnel, and to the community.

So long as the Air Council remains "satisfied that the organisation of the Royal Air Force medical service and the provision for supervision render it neither necessary nor desirable to institute a separate branch of the medical service to deal with pharmacy" it is obvious that further discussion is futile, but the Pharmaceutical Society's Council was entirely right not to allow itself to be led into accepting a scheme put over very plausibly to enable regular serving airmen to obtain a qualification "which would be of value to them in civil life on completion of their engagements with the Royal Air Force."

Two unacceptable defects in the scheme put forward by the Air Council were that the small number (six only) of commissions that would ultimately be granted to pharmacists would be in the medical branch, in which they would work under medical supervision; and that the pharmacist entrusted with the training of the Air Force pharmacy students would be without the necessary authority to ensure that the conditions of training were suitable.

The responsibility of pharmacy is towards the community. There must be a hammering away until the pharmaceutical needs of citizens in uniform are as adequately and responsibly met as are the needs of civilians. No considerations of organisational convenience within the Armed Services and no false sentiment in favour of "regulars" coming out to face the difficulties of supporting themselves in civilian life must be allowed to stand in the way of those prime needs. Until the Air Council has recognised, like the controlling bodies of the Armed Forces in other first-class nations, and like the civil authorities in Britain, that pharmacy is a distinct branch of the medical service, the Society's Council must accept the deadlock, knowing that members endorse their firm stand.

Limitations on "Free Choice"

Are we mistaken in detecting a certain hesitancy in the attitude of the British Medical Association toward the proposed new Joint Committee on Prescribing? It would appear that, unless it is perfectly clear to the Association that the sole purpose of the Committee is the classification of proprietary preparations, and in no way to impose restrictions on prescribing, the B.M.A. is unwilling to participate in the work.

Perhaps they are wise. In spite of repeated statements by the Cohen Committee that the responsibility remains with the doctor of deciding in each set of circumstances what medicine his patient needs, many doctors were led by the form in which the classification was issued into concluding that it had mandatory force. Even the recent assurance given to the B.M.A. by the Ministry that pricing bureaux would not refer prescriptions for investigation merely because they were in categories 5 and 6 may not be so final and conclusive as the doctors might have wished. On that subject the interpretation of the Chief Medical Officer may be offset in some measure by opinions within the Ministry (and, still more, within the Treasury and Public Accounts Committee) that, in a State service, doctors cannot be allowed to prescribe certain medicines. In that climate, a document issued as a "classification" may easily undergo metamorphosis into a restriction.

The freedom of the individual doctor to prescribe solely in the interests of the individual patient is regarded by the medical profession as of paramount importance, even in a State medical service, and we have no doubt that the doctor's representative association is keeping a watchful eye on that liberty, in the interests alike of the patient and of medicine as a profession.

Cosmetics and the Chemist

Chemists may be mildly surprised to learn that they are still, despite the many retail outlets now of cosmetics and hair preparations, by far the largest purveyor of those commodities. That fact is well brought home in a market survey carried out recently by Odhams Press, Ltd., publishers of periodicals.

Nearly 4,000 women from all over Great Britain took part in the company's survey. They were asked (1) how frequently they used a product; (2) the brand last used; and (3) where they made the last purchase. Chemists were found responsible for supplying 58 per cent. of the total for all hair preparations, bazaar stores supplying 13 per cent. The chemist's smallest share was in the shampoo-powder field (51 per cent.), his largest in the comparatively small bleaching-lotion market. The hairdresser's "perm" still predominated over the "home" kind, though the margin in its favour was not large. Women who had had a perm in the twelve months preceding the interview made up 53 per cent. of all women. Of that percentage 30 per cent. had had a "shop" perm against 21 per cent. who had a "home" perm (2 per cent. had had both).

The market for cosmetics has been growing rapidly during the past decade or so (a fact well known to chemists, who have the task of stocking many brands, some of them in a multitude of shades) yet there still appears plenty of room for expansion. One-quarter of the women interviewed never used even face powder (the most frequently used face cosmetic); one-third never used lipstick. Many other face cosmetics were restricted in use to less than one-fifth (some to less than one-tenth) of the people interviewed. Over 70 per cent. of face cosmetics were bought from chemists, 11 per cent. from their nearest rivals the bazaar stores. The most popular brands of foundation

cream and face powder were Pond's, the percentages of total sales being twenty-seven and twenty-three respectively.

None of the hand cosmetics could be said to be widely used. Nail varnish and hand cream, followed by varnish remover and hand lotion, were the only ones with any substantial following. Chemists sold 73 per cent. of all hand preparations used, bazaars being next with 12 per cent. The nail cosmetic market was dominated by Cutex, which claimed a 54 per cent. share. In perfumes (including Colognes and toilet waters), at least 67 per cent. was supplied by chemists, bazaars accounting for only 3 per cent. One-fifth of the users had obtained their perfume as presents and could not, therefore, identify the shop from which it had been purchased. Of the brands used, Goya and Bourjois (Evening in Paris) headed the list with 21 per cent. each. Almost one-half of the persons interviewed never used perfumes; three-quarters never used Cologne, and 87 per cent. never used toilet water.

It would be a fair conclusion that chemists could, with a little extra effort, entrench themselves even more firmly in a still expanding market for hair and cosmetic preparations.

ISONIAZID

A Note on Some Limitations in its Use

By L. R. C. Haward, D.Psy.(Leyden), M.A., B.Sc., A.B.Ps.S., A.M.Inst.E.

NOW that the first flush of enthusiasm about INH (isoniazid or isonicotinyl hydrazide) as the new "wonder drug" for tuberculosis has abated, and experience in its administration has been gained, it is a propitious time to take stock of progress. The writer is concerned more with the limitations of the drug than with its benefits, for two reasons. First, the many advantages obtained with the use of INH have already been well publicised in the medical Press, and unfortunately euphemistic accounts have unjustifiably raised the hopes of patients through lay literature. Second, the realisation that so many and varied after-effects and side reactions exist in a drug which was at first thought to be a simple bacillocide, may imbue a more cautious attitude towards the preliminary claims of other new drugs which appear from time to time. Drugs, like the curate's egg, are only good in parts, and for large-scale synthesis and other reasons, it is often necessary to couple the active chemical radicle to a basic group whose detrimental effects are not readily apparent.

Some Side Reactions

Early reports on side reactions showed that prolonged dosage of isoniazid produced a complicated picture of neuropathy. A typical case was that of a tuberculous patient receiving a daily medication of sodium para-aminosalicylate (PAS) 18 gm. and isoniazid 300 mgm. After six weeks of treatment he complained of hypersensitivity of the hands and feet, with considerable sweating of the palms and soles. Muscle power gradually became weakened in the wrists and fingers, and breathing became troublesome. PAS therapy was discontinued, but the symptoms persisted and deterioration in the patient's clinical condition continued until INH therapy was replaced by thiamine tablets 18 mgm. daily. Four weeks later he was admitted to hospital with signs of congestive heart failure, pronounced wasting of the muscles of the forearm and hands, wrist-drop, and other pellagric signs. Intramuscular thiamine and mersalyl failed to effect any change, but intramuscular nicotinamide 100 mgm. and mersalyl medication was followed by rapid improvement. The action of nicotinamide in that case is important, and will be referred to again. A number of other case histories described in the first half of 1953 (see for example *Lancet*, 1953. **1.** 1073) show that a common pattern of reactions to INH consists of "hot feelings" in the limbs, followed by numbness, and after some weeks from the cessation of medication a general picture of peripheral neuropathy with absent reflexes, pain in muscles on pressure, and areas of anæsthesia in the limbs. The totality of the effect does not seem to be related to the total dosage so much as to the physiology of the individual patient, but side reactions appear to be more frequent when the daily dosage is in the range 300-500 mgm.

In American investigations of the neural toxicity of isoniazid (e.g., *Arch. Neurol. and Psychiat*, 1953. **70.** 64) the lack of correlation between symptom severity and total dosage was also noted, although from the cases studied the neuropathy seemed a likely consequence of increased dose level, for the dose which produced the symptoms (4·5 to 13·5 mgm. per kilo of body weight) was in the range in which toxicity is to be expected. Although over 10 per cent. of patients in any one group have complained of paralysis and associated signs, it has been found that that process will clear rapidly provided medication is stopped immediately. Some patients can then be put back on isoniazid administration without recurrence of the symptoms, while others show acute signs after the first dose of the new course, and many hospitals have a schedule of increasing dose level of isoniazid until either the sputum is free of bacilli or toxicity develops.

An unrelated drawback of isoniazid[1] is its convulsive effect which it shares with many other hydrazides. Convulsions are rarely seen in isoniazid therapy of tuberculosis, but large doses in the order of 20 mgm. per kilo of body weight are sufficient to precipitate seizures of the grand mal type. These convulsions appear slowly and are similar to those produced by leptazol. They can be controlled by depressant drugs or in selected instances by intravenously administered pyridoxine, (vitamin B_6). Research into the ætiology and nature of isoniazid convulsions[2] showed that isoniazid lowered considerably the epileptogenic threshold (*C. & D.*, 1953. 2. 211), especially to photic stimulation, so that a light flickering in the face of a patient at about fifteen flashes per second was sufficient to produce severe convulsions followed by unconsciousness. Since INH medication is being used on an out-patient basis in some areas, the dangers described, for example, by Dr. Grey Walter in a television broadcast on November 6, 1953, apply here, for an out-patient cycling home from the clinic after receiving an injection, and passing through sunlit trees, may well experience just that frequency of intermittent light stimulation which would be sufficient to trigger off the seizure. The probability of such an occurrence is of course small, but the point to be made is that practical dangers do exist, and that these side reactions are not merely pieces of interesting theory.

So consistent have been the convulsive reactions to large doses of isoniazid, indeed, that the Universities of Chicago and Illinois have been co-operating with Manteno Hospital, U.S.A., to see if the drug could not be used in mental hospitals for shock therapy. In that respect however the drug failed to prove consistent, since it required a dosage of 45 mgm. per kilo body weight to guarantee a convulsion every time in every type of patient. Furthermore, with high dosage levels, heart rate is increased to a dangerous level sufficient to provide a contra-indication

for the use of the drug. It was found also that iproniazid, a related compound, was much more effective, and was capable of producing severe postural hypotension after only ten doses of 15 mgm. per kilo body weight.

The question arises whether these reactions represent a form of nicotinic acid poisoning. Dr. Gammon and others[3] have investigated reactions among 408 patients, and their results imply that the drug does not produce a syndrome of nicotinic acid deficiency, and none of the previous observations on animal and human toxicity show any resemblance to the classic nicotinic syndrome. In their series, patients who had administration of isoniazid stopped because of the severity of side-reactions showed no improvement with injections of nicotinic acid unless the total dosage exceeded 400 mgm. The actual clinical condition of the patients, however, and their medication history prevented the investigators from discovering whether the action of isoniazid was in fact antagonised by nicotinic acid. Drs. W. A. and G. P. Jones, Aintree Hospital, Liverpool,[4] on the other hand, believe that the complex neuropathy caused by isoniazid results from the competitive inhibition of nicotinic acid by isoniazid. Support for this hypothesis comes from the similarity of these symptoms with those of pellagra, and the fact that they respond to therapy with nicotinamide. In the patient described earlier with cardiac failure, the symptoms were apparently related to a nicotinic acid deficiency. There is also evidence to suggest that the deficiency of other members of the vitamin B_2 complex may be involved in producing the complications of isoniazid therapy. The cases mentioned and many others in the literature indicate that the complex peripheral neuropathy caused by isoniazid puts a clear limitation on therapy with higher doses of this drug, although the paralysis produced does not appear to be permanent, and it is possible that in certain circumstances the drug could prove more toxic to the patient than his tubercle bacilli. Nevertheless, the rapid positive recoveries experienced with isoniazid, especially in those cases that have not responded to other forms of therapy, more than outweigh the disadvantages of the side-reactions, and make it a valuable and important weapon in the present vigorous offensive against the white plague.

REFERENCES

1. *Journal of the American Medical Association*, 1953. **152.** 1317.
2. *D. Neur. and Psych.*, 1953. **21.** 428.
3. *ibid.*, 429.
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CORRESPONDENCE

AN ASSOCIATION OF REPRESENTATIVES

SIR,—The objects of the Association of which I am secretary are the exchange of information about doctors in various districts/areas, the sponsoring of members of Executive Councils, hospital management committees, the provision of a car badge that the police will acknowledge, etc. There are many other advantages of membership. The annual fee is 10s. Full details will be sent to any representative who applies to:—

The Secretary,
ASSOCIATION OF MEDICAL REPRESENTATIVES
772 WHALLEY NEW ROAD,
BLACKBURN, LANCS.

CORK PRICES

SIR,—For some years the world demand for corks, coupled with reduced crops, has materially affected costs. The effect has been heightened by increased demand, particularly from countries able to pay in dollars. British cork importers have, therefore, been penalised, since those countries have been outbidding the United Kingdom. To secure sufficient supplies for the home market, importers have had to be prepared to meet continued price increases. At the annual meeting of the Cork Trade Association, it was agreed to publish those facts, so that users should realise that suppliers must increase prices to obtain adequate stocks.

CORK TRADE ASSOCIATION,
J. V. BOWRING, *Secretary*
LONDON, E.1

Onward from Galen

A CURRENT CAUSERIE

ILLUSTRATED in the supplement to the report and accounts for 1953 of Evans Medical Supplies, Ltd., is a materia medica cabinet issued by that company almost seventy years ago and discovered in St. George's Hospital, London, by the chief pharmacist in 1953. The mahogany cabinet has eight drawers and contains altogether nearly 400 specimens of drugs, all of which appear to be in good condition. Only two other, but probably less well preserved, specimens of such cabinets issued by the company have previously been found, and both are in the muscum of the Pharmaceutical Society.

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LORD SILKIN is reported to have said recently "If one wants peace and quiet now one has to go to the centre of a large town—to Bloomsbury Square or Smith Square." One may, perhaps, agree with the underlying truth while quarrelling with his examples. As an ex-member of a Labour government Lord Silkin must know well that Smith Square houses Transport House, the headquarters at once of the many-voiced Transport and General Workers' Union and of the Labour Party. What he wrote of Smith Square may therefore have been written with his tongue in his cheek. With Bloomsbury Square the conclusion is inevitable that he picked on it from theoretical considerations only, without knowledge of what actually goes on there. Leaving aside the fact that important bus routes traverse its southern end, so that a pedestrian enters the square at peril of his life, there is the all-important fact that No. 17 is the headquarters of the Pharmaceutical Society. Can Lord Silkin have been aware that regularly every month there occurs the cut and thrust of a Council meeting with pandemonium only kept within reasonable bounds by rigorous raising of the "In committee" flag? Or that, in other and nominally more studious parts of the building a desperate appeal for silence is often to be found pinned to the lecture-theatre door so that the lecturer can make himself heard? Or that once a year on the opposite side of the Square the Society's members meet in force to throw out with one voice (but from many lungs) some unacceptable proposal of their elected representatives on the Council? Gordon Square, yes. Queen Square, perhaps. But somebody should take Lord Silkin on a tour of Bloomsbury Square.

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To presuppose any lessened lowered popularity for collapsible tubes as containers would be, on current observation, entirely unwarranted. Rather the reverse, since tubes seem to be coming into use for foodstuffs, motor lubricants, and many other products besides the tooth-pastes and other goods never seen except in such packs. But the tube manufacturers are looking well ahead and taking steps to see that other types of container do not gain ground on collapsible tubes, even in the plans of manufacturers and designers. The special problems of printing on curved instead of flat surfaces, and of imparting coatings that are elastic enough not to flake off as tubes are rolled up (or even mishandled) are acute enough, if not properly solved, to make tubes uncompetitive containers. Accordingly the Collapsible Tube Manufacturers' Association, 47 Welbeck Street, London, W.1, proposes to set up a panel of lecturers —"with special reference to external design"—to instruct members of trade associations and designers' organisations. The bodies already approached include the Society of Cosmetic Chemists, Toilet Preparations Federation, dentifrice manufacturers' section of the London Chamber of Commerce, Institute of Packaging, Society of Industrial Designers and even—looking rather the interloper in a homologous series—the Pharmaceutical Society of Great Britain. Whether the manufacturers are hoping that some branch secretary may see possibilities of a profitable evening on the subject is in doubt.

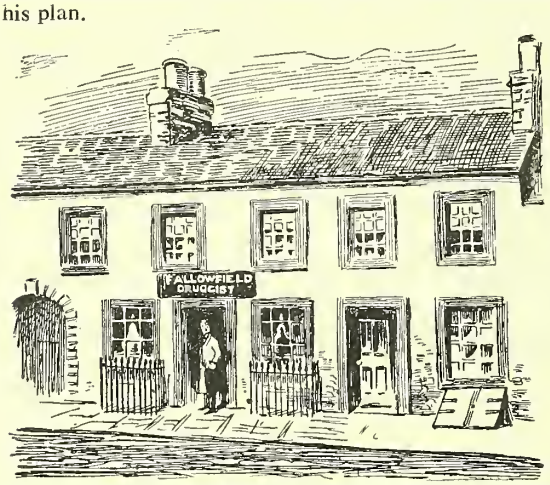
A redesigned shopfront reflects the distinctive character of

A CUMBERLAND PHARMACY

founded in the reign of George I

ONE of the oldest pharmacies in the country—that of Thos. Edmondson, Ltd., Penrith, Cumberland—has recently been extensively altered internally and given a new shopfront in eighteenth-century style. The business of a chemist and druggist has been conducted at the premises for more than two-and-a-quarter centuries.

In 1926, when Mr. Frank Fawcett acquired the goodwill from the executors of the late Thomas Edmondson, it was converted into a private company, with himself as governing director. Mr. Fawcett had long cherished the idea of completely altering both interior and exterior of the premises to reflect the distinctive character of a business of such antiquity while meeting the needs of a modern pharmacy with a good country *clientèle*. It was not, however, until the autumn of 1953, when the necessary building permits were granted, that he was able to give expression to his plan.



How the shop appeared in 1800 (from a sketch reproduced in The Chemist and Druggist in 1902).

The new shopfront is finished in sealed natural oak set on a York stone base, the facia having incised gold letters. The intention is to fit flower boxes in the window sills above the facia. The centre display window is left open to the shop, apart from a low wrought-iron grill fitted across the back; the whole of the shop may thus be viewed from the street. In redesigning the interior it was necessary to gut the premises completely. A staircase leading from the street to stockrooms was removed, new stairs were built at the rear of the premises, and the space thus gained was merged into the shop.

The dispensary is now a free-standing unit. Its front incorporates showcases in the lower portion, a screen made of figured walnut in the upper. The rear of the screen carries several rows of shelves for dispensing rounds. The dispensing counter top is covered with an acid- and burn-proof material, with central stainless steel sink. Considerable thought was given to designing the section below the counter so as to make optimum use of the space and provide every facility for speedy dispensing. To that end drawers for labels, corks, wrapping paper, etc., are fitted with adjustable partitions; the space for empty dispensing bottles is provided with adjustable sections at 1-in. intervals, etc.

The walls of the shop have been lined with showcases having shelves and sliding sashes of plate-glass. An open shelf separates the upper showcases from the lower and, being strip-lighted, provides an unbroken line of light around the shop. The emphasis is on displaying all stock and making as much as possible of it available for inspection by customers. At intervals the wall cases are broken by circular-headed alcoves illuminated from the top and having plate-glass shelves. Wall spaces have been covered with fine walnut panelling. Heating and ventilation are electrical and all metal work is in brown bronze, the absence of chromium throughout being intentional.

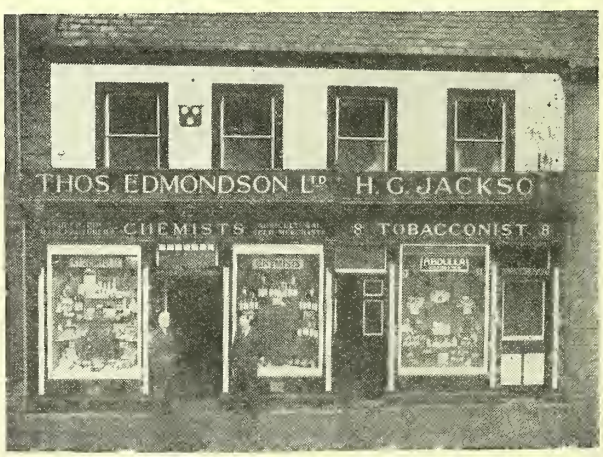
The expression of Mr. Fawcett's idea was entrusted to Fredk. Sage & Co., Ltd., London, W.C.1, contractors whose high craftsmanship is exemplified in the carving and other furnishings carried out by them in the new House of Commons.

As might be expected in a predominantly agricultural area, emphasis is given in the pharmacy to meeting needs of the farmer. The manufacture of various sheep dips for dispatch to all parts of Great Britain has long been a feature of the business. So, too, has been the supply of seeds. Today the combination of pharmacy with the business of seed merchants is a rarity, though that was not always so. In the eighteenth century, when the business was founded, and for many years afterwards, seed merchants, as such, were unknown. Changes in methods of agricultural practice brought such problems as how to re-establish a sward ploughed out after land had been sown with grain. A farmer requiring information would naturally turn to a local person with a knowledge of botany; from that it was an easy step to procure the right kind of seeds for the farmer.

John Fallowfield founded the business—the first in Penrith—in 1726. Since then the succession has been as follows:—

John Fallowfield	1726-1775
Jonathan Fallowfield	1775-1811
James Fallowfield	1811-1845
William Hodgson	1845-1850
Joseph Wilson	1850-1880
Grierson, Ltd.	1888-1894
Thomas Edmondson	1894-1926
Frank Fawcett	1926-

The earliest books have failed to survive. The oldest remaining prescription-book begins in the time of James Fallowfield, at 1836, the year before Queen Victoria came to the throne. The drugs ordered in the prescriptions recorded there are mostly to be found in the London Pharma-



The pharmacy as it appeared immediately before the reconstruction.



The shopfront as it appears today, finished in sealed natural oak and designed in an eighteenth-century style.

copœias of 1824 and 1836. Possibly from the proximity of Cumberland to Scotland, the Edinburgh Pharmacopœia preparations had also some vogue, an example being syr. colchici, a distinctly Scottish galenical. Pills made for a local baronet had the formula:—

Pil. sagapen. comp. ʒi	Misce et divide in pil. xxiv.
Ext. anthemid. gr. XL.	Sumat ij. omni nocte.

Their size—over 20 grains—is rather more than most modern gullets would tolerate. Among the historical books still preserved is a copy of *Pharmacopœia Collegii Regalis Medicorum Londinensis,* 1746.

A cash-book discovered at the beginning of the present century starts at the year 1797 and shows that the Fallowfields were methodical and in a good way of business. The book seems to show that, up to 1804, Jonathan Fallowfield was in partnership with Joseph Fallowfield—they were probably sons of the founder. A local antiquary would find from the old account book the wages, rents and taxes payable at the time, while in both cash-book and prescription-book are to be found the names of the chief families of the district, some of the descendants of whom still live in the neighbourhood. Mr. Francis Newbery, Mr. C. Hodgkinson, Schweppe & Co. who received periodical payments, were the predecessors of firms that still exist. Liquorice was bought frequently from R. Dunhill. Leeches were an important commodity. The following entries show the numbers bought and prices paid in the years 1797-1804.

1797	Sept. 7	200 leeches	£1	12	0
1798	May 5	100 leeches	£1	10	0
1799	May 3	400 leeches	£3	0	0
	Sept. 8	200 leeches	£1	12	0
1800	June 18	100 leeches		10	6
1801	Ap. 11	100 leeches	£1	4	0
1802	May 20	200 leeches	£2	0	0
1804	Feb. 12	— leeches	£4	13	6
	May 17	100 leeches	£2	2	0

Skin-plasters cost 4s. per doz. in 1797, and in 1798 the tea licence cost 5s. 6d., the tobacco licence 2s. 6d., Catsup and Riga balsam 11s., is an entry in 1799. As much as £35 5s. was paid in one sum for soap in 1800: a bundle of blue paper cost 12s. 3d. in 1801, and 500 directions for Godfrey's cordial 9s. in 1805. The Northumberland Glass Co. figures in early payments; doubtless from that firm bottles were obtained. Indigo occurs several times, sums of £3 or £4 being spent on it. Payments for logwood also occur but, the quantity bought not being indicated, the price is less instructive than it might have been. Many entries speak volumes—for instance, Betty Pearson, the housemaid, had £3 a year wages. Payments for window-tax and house-duty at the beginning of the nineteenth century tell of the straits the Chancellor of the Exchequer was in at that time to raise money. And the entry "2 hats £2 10s.", in 1811, shows that the hats of today are not an extravagant item on comparisons of price.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN

PROPOSALS FOR AIR FORCE TRAINING REJECTED

THE Council of the Pharmaceutical Society, at a meeting in London on April 7, passed for publication the following (summarised) statement on discussions the Council had had with the Air Ministry over a proposed scheme for training regular Royal Air Force personnel as pharmacists:

In 1952 the Air Ministry proposed that men possessing the necessary basic educational requirements would be selected for qualifying as pharmacists. Initially it was suggested that the men should study in their own time and obtain exemption from the Society's Intermediate examination by passing the appropriate subjects at advanced level in the general certificate of education examination. Two years study leave would then be granted to enable them to study for the Qualifying examination and subsequently they would obtain the required period of practical experience in an R.A.F. hospital. After discussion it was agreed that a further year's study leave would be granted to enable the selected men to undergo a full-time course of study for the Intermediate examination. It was proposed that ultimately six commissioned officers would be distributed through the commands. The Council objected to the scheme as it suggested that pharmacists trained in the usual manner could not fulfil all the functions envisaged by the Air Ministry and implied that pharmacists would receive treatment different from that accorded persons of similar professional status, that being borne out not only by the source of recruitment and the small number of commissions to be made available but also by the proposal that the commissions should be in the medical technicians branch where the pharmacist would work under medical supervision. Training would have to be the responsibility of a pharmacist, and R.A.F. pharmacists were simply employed as dispensers in the same way and with the same status as service-trained dispensers. The non-commissioned pharmacist would have no authority to ensure that suitable training conditions were available.

R.A.F. Hospital Inspected

Again, a pharmacist might quite well have the strongest objection to having his qualification used for the training of such students since he would be training someone to occupy a position to which he himself could never attain if commissions were reserved for service-trained personnel. Following an application for the approval of a large R.A.F. general hospital for practical training under the scheme the hospital was inspected by representatives of the Society. The provision for pharmacy there was found to consist of a dispensary and a medical store. At the time of the visit neither section was in charge of a pharmacist though three National Service pharmacists were engaged in the dispensary. The personnel in charge of the dispensary and medical store were responsible to the quartermaster of the hospital. The Air Ministry were notified that the Council could not at that time grant approval to the hospital and the position could not be rectified simply by the appointment of a pharmacist to supervise the training. The pharmaceutical department should be reorganised and established on modern lines but the extent and details of the reorganisation could only be determined by experience within the hospital itself. It was suggested that a pharmacist should be appointed with a rank not lower than that of squadron leader to be in charge of all pharmaceutical arrangements and directly responsible to the commanding officer. At the outset his main task would be to investigate and plan the reorganisation and after a period, if satisfactory progress was made, the Society would approve the hospital. It was pointed out that the Council's suggestion was based on considerations applicable to any R.A.F. hospital of comparable character whether or not students were to be trained there. The Air Council stated that they could not accept the suggestion. In their reply they "regretted that as a result of the Council's decision not to recognise practical experience obtained by students in that R.A.F. hospital, service-trained dispensers will be precluded from obtaining a qualification which would be of value to them in civil life on completion of their engagements with the R.A.F." The Council replied that it could not accept the implication that the Society was responsible for the inability of service personnel to qualify as pharmacists. The conditions laid down before approval could be granted to the hospital were merely those necessary to ensure satisfactory training. It was suggested to the Air Ministry that there was no reason why the students should not undergo their practical training in approved hospitals outside the service. The Council pointed out that the situation in which the Air Council found itself was basically due to failure to recognise pharmacy as a distinct branch of the medical service, and that now appeared to be a suitable opportunity for re-opening discussions of the whole question of pharmacy in the R.A.F. In reply the Air Ministry said that the Air Council was satisfied that the organisation of the R.A.F. medical service and the provision for supervision rendered it neither necessary nor desirable to institute a separate branch of the medical service to deal with pharmacy, and that in the circumstances no useful purpose would be served in re-opening discussions.

Scottish Lecture Tour

The report of the eighth meeting of the Franco-British Pharmaceutical Commission, held in London on March 13, and presented by its chairman (Mr. D. W. Hudson) stated that the counterpart of a lecture tour in progress in France, with the president and Professor Macdonald as the lecturers, was being undertaken by Professor Morette (professor of inorganic chemistry and inspector of pharmacies) and Mr. Ahr, Rheims (a professional pharmacist). They would visit Aberdeen, Dundee and Glasgow from May 5 to 15, accompanied by Dr. D. McCall. Two of the lectures would be delivered at meetings of local branches. Mr. Hudson said that the Society had learned with pleasure of the appointment of Dr. Rolland as *President* and Mr. Martinot as *Vice-president* of the *Ordre des Pharmaciens*, and of the appointment of Mr. Gaudin as *Chevalier de la Santé Publique*. The Council decided that its official representatives at Dinard should be the president, vice-president, registrar, and Dr. McCall. MR. HUDSON said that discussion on veterinary matters at the London meeting of the Commission had shown that the problems of pharmacists in veterinary matters in both countries were similar.

The Council approved a recommendation of the Organisation Committee that the subject for discussion at the September Branch Representatives' meeting at Oxford should be "Developments and Changes in Pharmaceutical Practice in Post-war Years."

The Council decided to raise no objection to the Hendon and Edgware Branch adopting in place of Rule 10 of the model rules for branches the following:—

The officers and one third of the committee shall retire at the annual meeting, but shall be eligible for re-election, the elected committtee members serving for three years. Any vacancy occurring during the year may be filled by the committee.

It was reported that in reply to a letter from the Society asking when the report of the committee of inquiry on the hospital pharmaceutical service was to be published, the Ministry of Health had stated that no decision had yet been taken but that a summary would be included in the report of the Central Health Services Council.

Veterinary Committee

The minutes of the first meeting of the Veterinary Committee, held on March 3, recorded that Mr. C. W. Maplethorpe had been elected *Chairman*, and that preliminary consideration had been given to legislation on veterinary medicines, restrictions on supplies and the distribution of veterinary penicillin preparations.

The Council approved a report on the administration of the pharmaceutical flood relief fund which showed that altogether some 6,000 persons had contributed, the amount subscribed being £12,543. Letters had been sent to forty-three pharmacists who had suffered flood damage offering assistance. Forty-one had submitted claims showing total losses amounting to £18,153, towards which £8,792 had been received from other relief funds and from insurance

offices. The balance remaining from the Fund is to form an emergency fund "for the relief of pharmacists in distress arising from any local or national emergency."

On the recommendation of the Law Committee, and after considering reports on the use of slippery elm bark as an abortifacient, the Council decided to call attention to the danger of supplying slippery elm bark unbroken.

The Benevolent Fund Committee's report showed that grants amounting to £343 had been made to four widows, five members, and a dependant of a former member. In two other cases the Committee had made a grant and emergency payments amounting to £86. The Council approved recommendations for grants amounting to £386 to three widows and one member, a grant of £30 from the Orphan Fund to a widow, and grants amounting to £431 to two applicants from the War Aid Fund.

MR. T. REID, presenting the minutes of the Committee reported that the cost of the replacement of china at Birdsgrove House averaged £20 a year (£114 to date). He congratulated the North Staffordshire Branch, which had made those replacements, on their effort. Total subscriptions to the War Aid Fund to March 16, were £40,802 and expenditure to the same date £26,865. In view of the response to the East Coast Flood Disaster Fund, the contributions to the various funds had been generous.

The report also stated that the committee had considered the procedure to be followed in the application of the superannuation scheme when a member of the Society's staff retired. Among its recommendations, accepted by the Council, were that a separate superannuation fund through which all future superannuation settlements would be effected should be commenced; and that the present liability on members' accounts and the investment of £8,000 allotted to cover that liability and the superannuation reserve should be transferred to this new fund.

The Law Committee reported that in February the Society's inspectors and agents visited 1,805 authorised sellers, 299 listed sellers, and 354 drug store proprietors and similar traders. Eight cases of alleged infringements of the Pharmacy and the Penicillin Acts were considered.

PHARMACEUTICAL SOCIETY OF NORTHERN IRELAND

AT a meeting of the Council of the Pharmaceutical Society of Northern Ireland, held in Belfast on April 9, the president (Mr. W. H. Boyd) in the chair, there were present Messrs. W. P. Ewart (vice-president), J. Irwin (treasurer), S. E. Campbell, H. J. Cousley, H. W. Gamble, J. McGregor, H. F. Moore, P. R. W. Shinner and Walter C. Tate. The secretary (Mr. W. Gorman) was in attendance. An apology for absence was received from Mr. H. P. Crossin.

A letter was received from the Ministry of Home Affairs approving the appointment of the Board of Examiners made at the March meeting (see *C. & D.*, April 3, p. 347). An application for the reissue of a certificate of registration was granted.

On the motion of MR. GAMBLE, seconded by MR. MOORE, the Council decided to affix the Society's seal to the new regulations dealing with examinations. The Regulations read:—

"67A.—The Council, on the advice of the Board of Examiners, are hereby empowered to require a student who has failed to pass Part 1 of the Final Qualifying Examination on the first or any other occasion to undertake an approved course of study in one or more subjects before being permitted to enter the said Examination on any future occasion. If a student shall have failed on three occasions to pass Part 1 of the Final Qualifying Examination he shall not be entitled to enter for the said Examination on any future occasion, provided always that the Board of Examiners may recommend to the Council that any such student should be allowed to enter on one more occasion only, and in this matter the Board shall be guided by that student's standard of answering at any previous Examination or Examinations. 67B.—The Council, on the advice of the Board of Examiners, are hereby empowered to direct that any student who has failed to pass Part 2 of the Final Qualifying Examination on any occasion shall undertake an approved course of study to be prescribed by them in such one or more subjects as they shall prescribe before being permitted to enter for the said Examination on any future occasion and in considering this matter the Council and the Board of Examiners shall have regard to the standard of answering of the particular candidate at any previous Examination or Examinations."

It was decided that the regulations, which require the signature of the Minister of Home Affairs before presentation to Parliament, shall take effect from June 1.

At a recent meeting of the Northern Ireland Chemists' Benevolent Fund in Belfast grants were made to a pharmacist and to the dependants of deceased pharmacists. The chairman (Mr. W. H. Boyd) said that a sum of £5 had been received from the Londonderry and Strabane Chemists' Association and £25 from the associates' section of the Ulster Chemists' Association.

BRITISH FINE CHEMICALS AND THEIR USES

6. BISMUTH SUBNITRATE

BISMUTH subnitrate is probably the most widely used salt of bismuth, since apart from its direct use in different industries and medicinal applications, it exists as a heavy white powder which can be conveniently weighed out for conversion to other bismuth compounds.

When pure it should contain almost exactly 79 per cent. bismuth trioxide, and if kept out of contact with the atmosphere, remains consistently the same. In contact with air it tends to become yellow, and is very sensitive to impurities in the atmosphere, notably hydrogen sulphide. Although still used in cosmetics, the tendency to blacken in impure atmospheres has reduced its demand from that quarter.

It is utilised in different ceramic activities, for porcelain lustre paints, for certain glazes, enamels and fluxes, and as a paint (although not as an actual painter's colour), under the different titles of bismuth white, paint white, Spanish white, and pearl white.

In making certain of the highly refracting glass compositions, bismuth subnitrate has been used to replace the trioxide, although the latter is adhered to for other high lustre optical glasses. Firms engaged on the production of corrosion-resisting and submarine paints used the salt for some time, as also did those engaged in making liquid gold, but details of those activities are lacking. In the medicinal field, bismuth subnitrate is, of course, used as a sedative and astringent both internally and externally.

In the laboratory it is employed in the preparation of Nylander and Almen's reagent, for the conversion of arsenious and arsenic sulphides into their corresponding acids, and as a test for minute quantities of iodides.

Bismuth subnitrate is prepared from the metal refined electrolytically (and of 99·999 per cent. purity) dissolved in nitric acid and precipitated by adding water. Commercial varieties frequently contain minute quantities of lead, arsenic, silver, chlorides, carbonates, sulphates, and ammonia. When silver nitrate is present, the salt tends to turn grey on keeping for lengthy periods. The stannous chloride test for arsenic is not entirely reliable, since on certain occasions a faint brown colour has appeared due to the presence of tellurium. After igniting the sample to drive off nitric acid and subjecting to the Marsh test for half an hour, the residue from the pure salt should show no evidence of an arsenical mirror. One of the unique uses of bismuth subnitrate is in the direct recovery and conversion of the skimmings from low melting point alloys, where the nitrate acts in the capacity of an oxidising agent, and the bismuth balances the shortage of this metal in the by-product.

INFORMATION WANTED

The Editor would appreciate information about suppliers of the following items:

SAVOL soap

ESSENTIALS OF TREATMENT

A *C. & D.* "post graduate" course for pharmacists

DEALING SPECIALLY WITH THE PHYSIOLOGICAL AND PHARMACOLOGICAL PRINCIPLES INVOLVED

By a Medical Man

21. INFECTIOUS DISEASES.—*continued*

Blackwater Fever

THE previous article dealt with malaria and the various methods of treating it. Space did not permit mention of blackwater fever, which is really a complication of subtertian malaria. It occurs sometimes when a chronic infection is treated with quinine, and its cause remains unknown. Blackwater fever is a serious complication, comprising haemolysis of the red blood cells, and resulting, in the most serious cases, in anuria. As a consequence of the introduction of synthetic antimalarial compounds the incidence of blackwater fever has diminished considerably, but it is as well to give a few words on the subject, if only to emphasise that quinine has dangers just as potent as, if not more potent than, the synthetic drugs.

The fundamental change that takes place in the patient is the haemolysis of the red blood cells: from vomiting and other causes the patient can become dehydrated in a very short time. That fact is important, because the outlook is gravest when anuria is superimposed upon blackwater fever. The essential of treatment is to replace the haemolysed red blood cells and to maintain the renal flow. Blood transfusion is therefore a life-saving measure. So soon as the diagnosis has been made, steps should be taken to prepare for transfusion. The blood may be given as a straight transfusion of about 300-500 mils, or alternatively as a continuous drip. If haemolysis is severe, and dehydration not so marked, the blood cells may be transfused by means of a concentrated suspension. In that way the circulation does not become overloaded. The quantity of blood and the manner in which it has to be given are determined by the clinical condition of the patient and if necessary by haematocrit (blood-corpuscle centrifuge) readings and determination of the specific gravity of the plasma.

Since anuria is so serious a complication, every effort must be taken to sustain the renal flow, and the patient should be encouraged to take as much fluid as possible by mouth. The urinary outflow, like the fluid intake, is measured daily as a guide. If anuria shows signs of developing, it is logical to reduce the nitrogenous intake, because there are grounds for assuming that the anuria is accompanied, if not actually caused, by necrosis of the renal tubules. Reducing the nitrogenous intake lessens the nitrogenous excretion to a minimum, and reduces also the load upon the kidneys. Once anuria has occurred, the prognosis is exceedingly grave. Good reports have been made upon continuous administration by the drip method (using a stomach tube) of the following emulsion:—

℞	Glucosi	400 gm.
	Ol. arach.	100 gm.
	Pulv. acaciæ	q.s.
	Aq. dest.	ad 1,000 mils
	Misce fiat emuls.	

Once the acute stage of blackwater fever has been overcome, recovery is usually uneventful but prolonged. Where anæmia exists, iron needs to be prescribed. When recovery is complete, the patient should be given antimalarial therapy, using curative doses of the synthetic drugs, not quinine.

Amoebic dysentery is another tropical disease which, though it does not occur primarily in this country, is to be found not infrequently as a relapse in a patient who contracted the disease while serving abroad. It is caused by a protozoon, *Entamoeba histolytica,* which is conveyed either in the water supply or in food prepared by carriers of the infection.

Diagnosis of Amœbic Dysentery

So soon as the diagnosis is made, the patient is confined to complete bed rest, and emetine hydrochloride gr. 1 in 1 c.c. of water is given by intramuscular injection. It is essential that the patient should be confined to bed while emetine therapy is given, on account of the toxicity of the drug, particularly so far as the cardiac muscle is concerned. The fall in blood pressure and rise in pulse rate must be noted. One injection is given daily for three or four days, after which the acute symptoms are usually controlled. Following the injections, the patient is given a 3-gr. capsule of emetine and bismuth iodide daily for twelve consecutive days. The capsules are gelatin-covered and are given late in the evening, usually with a sedative dose of phenobarbitone (about 1 to 1½ gr.). The capsules should be given with a large draught of water, and it is not infrequent for vomiting to occur about three hours after administration. The vomiting is believed due to the action of the drug on the central nervous system.

It used to be customary to give patients chiniofon retention enemas after a course of emetine and bismuth iodide, but the practice has been less common since the introduction of di-iodo hydroxyquinoline, three 3-gr. tablets of which are given three times a day for twenty consecutive days. Sometimes time is saved by overlapping that with a course of emetine and bismuth iodide. When the amoebic disease has been long standing, the treatment is not always satisfactory, and the antibiotics may have a part to play. Favourable reports have been made on the results of giving 2 gm. of terramycin daily following emetine therapy.

Entamoeba histolytica forms cysts in some patients, and it is not considered necessary to treat them unless there is evidence that the infection is active. Such patients are of course liable to relapse, and they should be excluded from handling food. Periodic examination of the fæces is also helpful. In some cases liver abscesses develop as a result of the cysts. They have to be aspirated and, if there is a superadded pyogenic infection, penicillin or other antibiotic therapy may be indicated. It is almost certain, however, that the abscesses will require surgical drainage as well as antibiotic therapy.

A PHARMACIST'S ANTHOLOGY

As the number of medical students increased through the efforts of Graves, Stokes, and Colles, the demand for bodies became more insistent and the resurrectionists formed a ring to demand higher prices for them . . . Resurrectionists were, as might be expected, a depraved, vicious caste, although not devoid of courage. The more adventurous students were, however, thrilled by their exploits. . . . A favourite plan of the students consisted in putting an old suit of clothes on the corpse, and, with a student supporting it on either side, to make it stagger along like a drunken man.—*From "Victorian Doctor," by T. G. Wilson.*

COLOUR AND PERFUME SCIENCE

Talks to Cosmetic Chemists

THE Society of Cosmetic Chemists at recent meetings has heard lectures entitled "Talking of Perfumes Again," given by Mr. J. Pickthall, F.R.I.C., and "Colour and Colour Vision," by Professor W. D. Wright.

PROFESSOR W. D. WRIGHT said that, while the colour of a surface was determined physically by its spectral reflection, account must be taken of the way the eye integrated the different parts of the spectrum reflected by a surface. Colour-matching experiments strongly suggested that there were three types of colour-sensitive receptor in the retina, and an international system of colour measurement had been established on the basis of three-colour mixture and matching. Adaptation could largely compensate for changes in quality of illumination (for example, between tungsten lighting and daylight) so that many familiar objects were markedly constant in colour with change in lighting. But some coloured materials, and especially those with a high reflection band at the red end of the spectrum, exhibited striking colour changes. Fluorescent lamps posed a special problem because of the mercury lines in their spectrum, often accompanied by a deficiency of energy at the red end. The ability to discriminate colours varied. Illumination level, area of the samples, their proximity in space and time, etc., had marked effects. Tolerances for the colour of signal glasses had been laid down, but in some industries (e.g., the dyeing industry), the precision of matching was high, and specifying tolerances would be difficult. The application of colour science to cosmetics included colour specification, colour control in production, limiting the number of different colours that could be distinguished by the customer, study of the effect of fluorescent lighting on the colour rendering of complexions, and of the possibility of producing cosmetics that were colour-stable under different illuminants.

First Step for a Perfumer

MR. PICKTHALL said that, for a perfumer, the first step was to learn the odours of certain standard oils, and to be able to recognise them when they occurred. One means of doing that was to work as an analyst in a fine chemical laboratory. Floral perfumes that occurred repeatedly in bouquets or fancy perfumes were rose, jasmin, lilac and muguet. They might be made up from mixtures of phenyl ethyl alcohol, hydroxycitronellal, geraniol, geranium oil, terpineol, amyl cinnamic aldehyde, benzyl acetate, linalol, linalyl acetate and traces of musk ketone. Some information on the matching or imitation of an existing perfume might be obtained by chemical or physical means, such as chromatography or fractional distillation. It took no notice, of course, of any chemical blending that might have taken place (for example, group exchange between alcohols). That meant that a perfect match was rarely achieved. Selling price, origin and use gave certain clues. Smelling slips to determine rates of evaporation (i.e., partial fractionation) were also used. The back of the hand served as a steam-distillation. By rubbing the perfume on to it to speed up the evaporation it was relatively simple for an experienced perfumer to strip a perfume of its fineries and get down to basic ingredients. Each perfumer had a "peculiarity" note that might be a "cardboard" note signifying a heliotropin-vanillin combination, a "wet bathing costume" note indicating the presence of the anisyl odour grouping or a "plasticine" smell suggestive of amyl salicylate.

A simple lavender perfume could be made to the following formula:—

Lavender oil 40/42	...	89·5 per cent.
Bergamot oil	...	10·0 per cent.
Musk ketone	...	0·5 per cent.

As a perfume for a toilet water that would be regarded as acceptable, but in powders, lotions and creams the perfume would be fugitive, with a tendency to become stale; used in soap it would be a dismal failure. A reasonable soap perfume might be obtained by using lavandin, lavandin and lavender concretes and spike, modifying the ester notes by use of linalyl, terpinyl and bornyl acetates, and the alcohol notes by use of terpineol and borneol. Oakmoss, labdanum and musk could be added to assure adequate back notes and fixation, and to sweeten generally.

Fixation was a retarding of the rate of evaporation. In an ideal case of a mixture of ingredients all strong in odour and possessing identical, low vapour pressures, no fixative was necessary, but in practice one blend contained many substances of varying vapour pressure, and the problem was to make sure that the more volatile ingredients were not lost too readily. By Raoult's law it was apparent that an effective fixative had low molecular weight, low vapour pressure and molecular attraction for the other constituents. Fixative effects might be present in composition, for example, by dilution phenomena, or by chemical blending, as in the formation of hemiacetals between aldehydes and alcohols. If the chemical aspects of molecular attraction were considered it would appear to indicate that certain hydrogen-bonding effects explained the good fixative properties of benzyl benzoate.

BRAZILIAN IMPORTS

Revised Classification of Merchandise

THE new classification of merchandise for importation, in force since March 26, includes a large number of pharmaceutical preparations and raw materials that were omitted from previous lists. It transfers to category 1 (minimum premium 10 cruzeiros to the dollar, or equivalent in other currencies) many essential products, formerly placed in categories 2 or 3 (minimum premium 12 and 15 cz. respectively), thus reducing considerably the imported cost. Several less essential products have been transferred to lower groups, some to category 4 (minimum premium, 20 cz.).

Category 1 now includes all unspecified medicinal vegetable juices, extracts and oils and all fish-liver oils; pure sodium chloride; lanolin; medicinal liquid paraffin; pure mercury; phosphoric acids; oxide of magnesia; pharmaceutical sulphates, bromides, carbonates, phosphates and iodides; permanganate of potash; chloroform; bromoform; iodoform; quinone; cream of tartar; pharmaceutical salts and by-products; acids, chlorates, esters, ethers, phenol preparations and numerous pharmaceutical preparations and drugs, including ferments, vitamins and anæsthetics.

Category 2 now includes malic and tartaric acids and acids not elsewhere specified; dibutyl and dimethyl phthalate; ethanolamine; emetine; materials for sutures, antiseptics, etc.; pharmaceutical chlorophyll; naphthas.

Category 3 now includes aromatic and other aldehydes; halogenated, sulphonated and nitrated by-products and nitrated compounds; unspecified aromatic chemical products; special soaps for tooth-paste; synthetic resins.

Category 4 now includes animal glands and organs and raw materials of animal origin for medicinal use; extracts of aromatic plants; glucose; lactose; naphthaline; organic products, biological preparations and medicines not included in other categories; anti-virus preparations; vaccines and the like; vitamin preparations; penicillin and compounds thereof; natural and synthetic hormones; sulphonamides; alkaloids; iodine preparations; essential oils; concentrated solutions and mixtures of natural or artificial essences; synthetic aromatic concentrates.

Articles not specifically mentioned in other categories can only be imported under category 5 (minimum premium, 50 cz.). As less than 5 per cent. of the available exchange is now allotted to category 5, which includes luxury goods, premiums are very high.

Until September no licences will be issued to import from Germany pharmaceutical and medicinal raw materials, apparatus, instruments and other articles for medicinal, surgical, dental and veterinary uses, the exchange allotted to those classes having been exhausted. The Brazilian Finance Minister stated at the end of March that he hoped shortly to be able to offer all foreign currencies at auction. So far, only U.S. and convention dollars, Danish and Swedish crowns and a few lots of French francs have been auctioned.

STANDARD FOR DISINFECTANTS

BRITISH Standard 2462, 1954 ("Black and White Disinfectant Fluids") provides means for a purchaser of black and white disinfectant fluids in bulk to identify fluids of good commercial quality. The standard covers five groups of black and six groups of white disinfectant fluids, classified according to the nominal ranges of germicidal value and the method of testing employed. General composition and stability before and after dilution are covered. Copies are available from the British Standards Institution, Sales Branch, 2 Park Street, London, W.1, price 2s. 6d.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, APRIL 14: The market for CRUDE DRUGS displayed no important features during the week. Many inquiries continued from the Continent, but few resulted in firm orders.

A parcel of new-crop BUCHU leaves was landed, but there are no shipment offers at present. IPECACUANHA remained scarce on the spot and at origin. Lively interest in RAUWOLFIA SERPENTINA is reported from India. Large houses in London and New York (as well as in some continental ports) have been offering to buy substantial quantities at considerably higher prices than those ruling some months ago, but most exporters in India are already fully committed for some months ahead. Meanwhile fifty bags of the root have been shipped from Tuticorin and are now afloat to London, while there are 115 bags destined for Hamburg and 100 for Rotterdam.

Tinnevelly SENNA shipments from Tuticorin during March are given below. The colour of both pods and leaves were faded.

	Great Britain	United States	Europe
	bales	bales	bales
Leaves	29	236	231
Pods	55	20	118

Indian CELERY SEED dropped 10s. a cwt. on the spot. The new method of charging freight for QUASSIA (*C. & D.*, April 3, p. 354), is now expected to add only 2s. a cwt. to the price on the London market but where there are no direct shipping routes from the West Indies the rates will be considerably higher.

With the prices of MERCURY advancing again, MERCURIALS were marked up by an average of 1s. 6d. per lb.; a new schedule is given below. Makers of SODIUM THIOSULPHATE increased their schedules by 12s. 6d. per ton to cover increased freight rates and labour costs. It is expected that similar low priced commodities will be required to bear those extra charges at an early date.

Trading in ESSENTIAL OILS was of a routine nature. PALMAROSA was again dearer for shipment with spot values showing a similar appreciation. Ceylon CITRONELLA was slightly higher but spot supplies are still under those from the origin.

UNITED STATES DRUG AND CHEMICAL REPORT

NEW YORK, APRIL 12: Some metal derivatives continued to advance, otherwise the price situation was featured chiefly by firmer GLYCERIN.

Higher per lb. among CRUDE DRUGS are BUCHU at 43 cents (up three cents), and AGAR with Kobé No. 1 at $3·90 (40 cents). Both items are extremely limited in quantity for prompt delivery.

ESSENTIAL OILS continue to show a firm tone. Exceptions were LEMONGRASS at $1·38 (down two cents), and LAVANDIN, $2·45 (down five cents).

The current prices of a number of PHARMACEUTICAL CHEMICALS (f.o.b., New York) are:—

	Cents per lb.
Acetone	10.25-10.50
Guaiacum resin	34.00-36.62
Hexamine	23.25
Magnesia, calcined	32.00-32.75
DDT	27.00
Sodium bromide	34.00-35.00
Camphor, synthetic	54.00
Glycerin, pure	33.50
	Dollars per lb.
Iodine, resublimed	2.55
Menthol, synthetic	5.15 nominal
Sulphanilamide	1.30-1.50
Theobromine	3.00
	Dollars per oz.
Emetine hydrochloride	32.95-35.00
Atropine	7.00-8.00
Nicotinamide	12.00-12.30 per kilo
Streptomycin	17 cents per gm.
Penicillin procaine in bulk, per million units.	8.5 to 9 cents.

Pharmaceutical Chemicals

ANEURINE HYDROCHLORIDE. — Prices (per kilo) range from £46 for 1-kilo down to £45 15s. for 100-kilo lots.

ANTIMONY SALTS.—Quotations for POTASSIUM TARTRATE, B.P., are 7s. 6d. per lb. for 1-10 cwt. and SODIUM TARTRATE, B.P., 13s. 3d.

ATROPINE.—Rates for 16-oz. lots are: ALKALOID, 29s. 10d.; SULPHATE, 24s. 1d.; HYDROCHLORIDE, 31s. 9d.; METHYLBROMIDE, 24s. 7d.; METHYLNITRATE, 33s. 7d. The price for 1-oz. lots is 6d. per oz. more than the 16-oz. rates.

BARIUM SULPHATE. — 1-cwt. lots of B.P. (*x*-ray) are 1s. 5d. per lb. and 5-cwt. 1s. 4d. per lb.

BENZAMINE. — LACTATE is 53s. per 100 gm. and 247s. per 500 gm. HYDROCHLORIDE is 56s. 6d. for 100 gm. and 264s. 6d. for 500 gm.

BENZOCAINE.—Minimum price for B.P. is 20s. 6d. per lb.

BISMUTH SALTS.—The following are the prices (per lb.) in largest bulk packages:—

	1-cwt.	28-lb.	7-lb.
	s. d.	s. d.	s. d.
CARBONATE ..	23 5	23 8	27 5
SALICYLATE ..	22 6	22 9	26 4
SUBGALLATE ..	21 8	21 11	25 6
SUBNITRATE ..	20 11	21 2	24 4

2-cwt. lots are 3d. per lb. less than the 1-cwt. rates. The present 1-cwt. rates for other salts are:—CITRATE, B.P.C., 22s. 8d.; NITRATE, crystal, 14s. 8d.; OXIDE, B.P.C., 27s. 7d.; OXYCHLORIDE, B.P., 27s. 9d.; OXYIODOGALLATE, B.P.C., 28s. 9d. and TRIBROMPHENATE, B.P.C., 26s. 9d.

CAFFEINE. — For 1-cwt. lots. ALKALOID, B.P., is about 21s. per lb.; ANHYDROUS ALKALOID, 22s. and CITRATE, 13s. 6d.

CITRATES.—Rates (per lb.) are as follows:—POTASSIUM, 1-cwt. lots, 3s. 6½d.; 28-lb., 4s. 6d.; SODIUM, 1-cwt., 2s. 11½d.; 28-lb., 3s. 10d. (powder of both salts twopence more). IRON AND AMMONIUM, 1-cwt. lots, 3s. 10½d. granulated, 4s. 2½d. scales.

CREAM OF TARTAR.—Rates for the home trade are now as follows:—1-ton lots, 191s. per cwt.; 10-cwt., 192s.; 5-9-cwt., 193s.; 2-4-cwt., 194s.; 1-cwt., 195s.

CREOSOTE.—B.P. quality, ex beechwood, is quoted at from 6s. 9d. to 7s. 6d. per lb.

CRESOL.—Price of B.P. quality from distillers is 7s. 9d. per gall. in 5-gall. lots.

ERGOMETRINE.—For 20-gm. lots the price of the MALEATE, B.P., is £37 10s. per gm. and the TARTRATE, £34 15s. per gm.

FERROUS SULPHATE.—1-cwt. lots of B.P. crystals are 36s. 6d. and 5-cwt., 35s. 6d. per cwt.; granulated, 2s. 6d. per cwt. extra. EXSICCATED is 90s. per cwt.

FORMALDEHYDE. — B.P. solution is 34s. per cwt.

GLYCERIN. — Rates for pharmaceutically pure are as follows:—

	Under 1-cwt.	1-cwt. and under 5-cwt.	5-cwt. and under 1 ton	1 ton and under 5 ton	5 tons and under 25 tons
Minimum deliveries off contract of	—	1 cwt.	1 cwt.	5-cwt.	10 cwt
Per cwt.	s. d.	s. d.	s. d.	s. d.	s. d.
TINS					
14-lb.	325 0	320 6	316 6	312 0	310 6
28-lb.	323 0	318 6	314 6	310 0	308 6
56-lb.	319 0	314 6	310 6	306 0	304 6
DRUMS					
1-cwt.	—	299 0	295 0	290 6	289 0
2½-cwt.	—	296 6	293 0	288 6	287 0
5-cwt.	—	—	292 6	288 0	286 6
10-cwt.	—	—	291 6	287 6	286 0

HYDROGEN PEROXIDE. — Manufacturers' price for single carboys of 20 volumes is 4s. 6d. per gall.

MAGNESIUM PEROXIDE.—Price (per lb.) for 1-cwt. lots of B.P.C. (15 per cent.) is 3s. 11d.

MAGNESIUM SULPHATE.—Quotations for B.P. in minimum 1-ton lots vary between £17 10s. and £20 per ton, according to size of crystal and manufacture. Exsiccated is £34 per ton.

MAGNESIUM TRISILICATE. — In 28-lb. packages the prices (per lb.) are now as follows:—28-lb., 4s. 9½d.; 1-cwt., 3s. 10d.; 5-cwt., 3s. 7d.; 1-ton, 3s. 1d.

MERCURY DERIVATIVES.—Dearer. Quotations (per lb.) for 1-cwt. lots are now as follows: AMMONIATED, B.P., lump or powder, 24s. 9d.; PERCHLORIDE, B.P., powder, 22s. 3d. (lump 22s. 6d.); SUBCHLORIDE, B.P. (calomel), 25s. 3d.; OXIDES, B.P.C., levigated, or yellow, B.P., 26s. 6d.

NIKETHAMIDE. — Prices per kilo are:—1-kilo, 115s.; 50-kilos, 107s.

PAPAVERINE. —Synthetic HYDROCHLORIDE is offered at 330s. per kilo, and ALKALOID at 420s.

PAS.—The SODIUM salt is from 30s. to 35s. per kilo as to quantity.

PIPERAZINE. — Quotations for HYDRATE are from 37s. 6d. per lb.

QUINIDINE.—Prices (per oz.) for minimum 100-oz. lots in the home market are: ALKALOID, 8s. 9d.; SULPHATE, 6s. 7d. Extra charges for small lots.

RESORCINOL. — 1-cwt. lots are now quoted at 13s. per lb. by manufacturer.

SODIUM SULPHATE.—Makers' prices for B.P. range from £10 10s. to £16 10s. per ton as to crystal and quantity.

SODIUM SULPHITE.—1-ton lots of ANHYDROUS (48-50 per cent.) are £62 per ton in 1-cwt. drums; CRYSTALS, B.P.C., £38 17s. 6d. in kegs and £30 12s. 6d. in paper-lined bags.

SODIUM THIOSULPHATE. — Makers' price for 1-ton lots in paper-lined bags is £34 per ton.

STEARIC ACID. — B.P.C. 1934 in 1-cwt. lots is 170s.; POWDER, 180s.

TEREBINTH.—B.P. is 2s. 3d. per lb.

Crude Drugs

ACONITE. — Spanish napellus is 3s. 2d. per lb., duty paid, ex wharf.

AGAR.—*Kobé* No. 1 on the spot is 18s. per lb. Forward, April-May shipment, 16s. 3d., c.i.f., sellers.

ALOES.—Prime Cape is scarce at 180s. per cwt. with f.a.q. at 175s., on the spot; shipment, no offers from origin. Curaçao is 305s. on the spot and 290s., c.i.f., for shipment.

ANTIMONY. — English 99.6 per cent., £222 10s.; 99 per cent., £210 per ton.

ARECA NUTS. — Quotations are about 45s. per cwt. for Ceylon material on the spot. Shipment, 42s. 6d., c.i.f.

ASAFŒTIDA.—Persian block is from £10 to £12 per cwt., duty paid, as to quality.

BALSAMS.—Quotations (per lb.) are:—*Canada:* 21s. 6d. to 22s. 6d. spot. *Copaiba,* spot supplies sold. *Peru,* 9s. in bond. *Tolu* (genuine as imported), is 25s., spot, and 25s., c.i.f.

BENZOIN.—Sumatra block No. 1 on the spot is from £30 to £34 per cwt.

BISMUTH METAL.—Minimum rate is 16s. per lb.

BUCHU.—A parcel of new-crop leaves is offered at about 2s. 5d. on the spot. No shipment offers.

CAMPHOR. — Chinese (B.P.) powder remains scarce on the spot with offers at 4s. 9d. to 5s. per lb., duty paid. ½-oz. tablets are 5s. 6d. per lb.; 2½-lb. slabs 4s. 9d. per lb., duty paid. Synthetic powder is 3s. 7d. per lb. for 100-lb. lots.

CAPSICUMS.—East African on stalk are 160s. per cwt., spot. Abyssinian, off stalk, 200s., spot.

CASCARA SAGRADA. — Firm. Offers for shipment are 285s. per cwt., c.i.f. Spot supplies are 325s., duty paid.

CASSIA BARK. — Whole on the spot is about 90s. per cwt., in bond, and for forward delivery, 80s., c.i.f. Broken 67s. 6d., in bond, and 62s. 6d., c.i.f.

CHAMOMILE. — Belgian flowers are 5s. per lb. on the spot.

CHERRY BARK.—Easier. Thin natural is from 1s. 8d. per lb., duty paid, and rossed, 2s. 1d., on the spot.

CINCHONA. — A parcel of *ledgeriana* bark, t.a., 9.28 per cent. is offered at 2s. per lb. on the spot. *Succirubra,* t.a., 6.8 per cent., is offered at 1s. 7½d.

ERGOT. — Quiet. Portuguese for prompt shipment is 15s. 6d. per lb., c.i.f.

GALANGAL.—For spot material of good quality 90s. per cwt. is asked.

GENTIAN. — French natural on spot is 100s. per cwt., and from 92s. 6d. to 95s., c.i.f.; sliced, 115s. spot.

HYDRASTIS.—Root is 18s. per lb., on the spot.

IPECACUANHA. — Spot market almost bare. No direct shipment offers.

KARAYA. — No. 1 gum on the spot is quoted at 200s. per cwt.; No. 2 is 140s.

KOLA NUTS.—African halves are available on the spot at 5½d. per lb.

LIQUORICE.—Natural whole root, spot: Anatolian, 55s. per cwt.; Russian, 40s.; Syrian, 37s. 6d. Block juice quotations are 195s. per cwt. delivered. Italian stick, from 310s. to 475s. per cwt., duty paid.

LOBELIA.—Herb is scarce on the spot. Nominal value is 3s. 6d. per lb.

MERCURY.—Dearer. Nominal spot value is from £80 per flask (76-lb.), ex warehouse.

MYRRH.—Aden selected sorts are about £14 per cwt. on the spot. Siftings are from £7.

NUTMEGS. — West Indian 80's quoted at 2s. 9d. per lb. on the spot and 2s. 5½d., c.i.f., for shipment.

ORANGE PEEL.—Bitter quarters. Spanish quoted at 1s. 3d. and West Indian at 1s. 1d. per lb. on the spot. Bitter ribbon 1s. 2d.

PEPPER.—Market eased with sellers at the following prices:—White Sarawak, 5s. to 5s. 1½d. per lb., spot; afloat, parcels at 4s. 10½d. to 4s. 11d., c.i.f. Black Sarawak, 5s., spot; shipment, 4s. 6d., c.i.f. Black Malabar. 600s. per cwt., spot.

PIMENTO. — Jamaican is firm on the spot at 4s. 6d. per lb.

PODOPHYLLUM.—*Peltatum* is 336s. per cwt. on the spot. *Emodi* is 140s.

QUASSIA. — Jamaican is 33s. per cwt., c.i.f., nominal.

RAUWOLFIA (SERPENTINA).—Spot prices nominal. Value for shipment, 6s. 6d., c.i.f.

RHUBARB.—Scarce. Chinese rough round is from 8s. to 8s. 9d. per lb. for sound. Wormy from 4s. to 6s.

SAFFRON. — Mancha superior is about 152s. and selecta, 149s. per lb.

SANDARAC.—Moroccan is 12s. 9d. per lb. on the spot.

SARSAPARILLA. — Jamaican native red is 2s. 9d. per lb. on the spot. Forward offered sparingly at about 2s. 6d., c.i.f.

SEEDS.—(Per cwt.).—ANISE.—Poor demand. Sellers quoting Cyprian at 167s. 6d., and Bulgarian, 170s., duty paid. CARAWAY.—Dutch offering on spot at 152s. 6d., duty paid. For shipment the price has eased to 120s., c.i.f. CELERY.—Small business reported. Indian on spot is now 200s. CORIANDER.—Quiet. Spot, Moroccan is 57s. 6d., duty paid (52s. 6d. in bond); English, 70s.; Rumanian, 54s., duty paid. Shipment, Moroccan firm at 49s. 6d., c.i.f., London. CUMIN.—Steady. Spot, Cyprian is 127s. 6d.; Maltese, 130s.; Moroccan, 127s. 6d., duty paid. Shipment, Cyprian, 112s. 6d.; Moroccan, lower at 102s. 6d. DILL.—Indian is unchanged at 90s., spot. FENNEL.—Quiet. Indian, 100s. to 110s., spot. FENUGREEK.—Moroccan is offered at 48s. 6d., duty paid, spot London. MUSTARD.—English remains firm with 60s. to 80s. quoted according to quality.

SENEGA. — Spot material offered at 16s. 3d.

SERPENTARIA. — Root is offered at 37s. per lb. on the spot.

SHELLAC.—Unchanged. Spot quotations are:—F.O.T.N. pure, 255s.; F.O. standard No. 1, 265s.; fine orange, 295s. to 335s. per cwt., ex-London warehouse.

SQUILL.—Italian white on the spot is 70s. per cwt. nominal. No. 2 is about 60s., no offers of white from origin.

STRAMONIUM.—Indian LEAVES are 5½d. per lb., spot and European, 97s. 6d. per cwt.

STROPHANTHUS.—*Kombé,* 100 per cent. is about 9s. per lb., on the spot, and *Gratus,* 16s.

STYRAX.—Spot is 5s. 9d. per lb., duty paid.

TAMARINDS. — Supplies of West Indian are offered at 50s. per cwt., duty paid.

TONKA BEANS. — Frosted Para on the spot are scarce at 6s. 6d. per lb. No. shipment offers.

TRAGACANTH.—No. 1 ribbon on the spot is £105 per cwt.; No. 2, £85; No. 3, £65.

TURMERIC.—Madras finger has sold on the spot at 155s. per cwt. and Rajapore at 145s. Shipment: Madras, 105s. to 115s., c.i.f., as to position.

UVA URSI.—Spot offers are about 85s. per cwt.

VALERIAN.—Indian is 145s. per cwt. on the spot and from 130s. to 145s., c.i.f. Belgian, 185s., spot.

VANILLIN. — Rates (per lb.) are:—5-cwt. lots, 30s.; 1-cwt., 30s. 3d.; 56-lb., 30s. 6d.; smaller quantities, 30s. 9d.

Essential and Expressed Oils

ALMOND.—B.P. is from 6s. to 7s. 6d. per lb., as to quantity.

ANISE.—Spot supplies are slightly firmer at 9s. 4½d. per lb., with shipment offers around 9s. 1½d., c.i.f.

BAY.—W. Indian is 8s. 6d. to 9s. per lb. on the spot.

BERGAMOT.—Spot value is about 80s. per lb.

BIRCH TAR.—Rectified is about 14s. per lb. in 1-cwt. lots.

CAJUPUT. — Spot supplies are 15s. 6d. per lb.

CALAMUS. — Imported oils are offering from 75s. per lb.

CAMPHOR, WHITE. — Chinese is 3s. 3d. per lb., on the spot.

CITRONELLA. — Quiet. Prices (per lb.) are:—Ceylon, spot, 3s. 11d. per lb.; shipment, 4s. 2d., c.i.f.; Java, 6s., duty paid; shipment, 5s. 3d., c.i.f.; Formosa, 5s. 9d., duty paid, and 5s. 3d., c.i.f.

CLOVE. — Madagascar leaf is 11s. 9d. per lb., duty paid, and 9s. 9d., c.i.f., for shipment. Redistilled stem oil from 17s. 6d., and English distilled bud oil is now offered at 55s.

COD-LIVER.—B.P. is 10s. 6d. per gall. in charged returnable drums. Veterinary is from 9s. 6d. per gall.

DILL. — B.P. English-distilled oil is quoted at 60s. per lb. Imported oils are offered at from 32s. 6d. per lb.

EUCALYPTUS.—Australian 70 to 75 per cent. eucalyptol on the spot is 4s. 10½d. per lb., and 80 to 85 per cent., 5s. 3d. Spanish, 70 to 75 per cent., 4s. 6d., duty paid.

FENNEL.—Spanish sweet on the spot is quoted from 9s. 6d. per lb.

GARLIC.—English is from 55s. to 60s. per oz.

GERANIUM. — Bourbon is 80s. per lb. on the spot. Shipment, 77s. 6d., c.i.f.

HYDNOCARPUS.—Spot is scarce at 2s. 2d. per lb.

JUNIPER BERRY. — Imported oils are offered at 17s. 6d. per lb. duty paid. English-distilled is offered at 75s. to 80s. per lb.

LAVANDIN. — Spot values are from 13s. 9d. to 16s. per lb., as to quality.

LAVENDER. — French, 40-42 per cent. linalol on the spot is from 33s. per lb.

LAVENDER SPIKE. — Spanish is about 11s. 6d. per lb.

LEMONGRASS.—East Indian is unchanged at 9s. 4½d. per lb. on the spot with forward offers (April-May), 9s. 3d., c.i.f., July-August, new crop, 8s. 3d.

PALMAROSA. — Firm. East Indian is 52s. 6d. per lb., on the spot, and 50s., c.i.f., for prompt shipment.

PATCHOULI. — Penang for shipment is 47s. 6d. per lb., c.i.f. with spot offers at 55s., duty paid.

PEPPERMINT. — *Arvensis:* Chinese is about 18s. 4½d. per lb., spot, and 17s. 1½d., c.i.f. April-May shipment: Brazilian (45 per cent.), 16s. spot, forward, 15s. 6d., c.i.f. Italian " Mitcham " type oil is from 47s. 6d. to 52s. 6d. per lb. on the spot.

ROSEMARY. — Spanish oil on the spot is about 5s. 9d. per lb., duty paid, for B.P. quality.

SANDALWOOD. — Mysore is 67s. to 68s. 6d. per lb.

SASSAFRAS.—Brazilian is 5s. 9d. per lb., spot.

SPEARMINT.—Offers of U.S.P. quality at 42s., c.i.f., per lb.

THYME.—B.P.C. is about 9s. 6d. per lb.

TITREE. — Spot supplies are offered at 14s. per lb.

VETIVERT. — Bourbon in original drums on the spot is 92s. 6d. per lb.

TRADE MARKS

APPLICATIONS ADVERTISED BEFORE REGISTRATION

From the "Trade Marks Journal," March 31

For agricultural and horticultural chemicals (1)
ZEST, 726,657, by Elva Phyllis Steele, Auckland, New Zealand.

For non-medicated toilet preparations (3)
BLUE PETER, 723,412, by the Flavian Trading Co., Ltd., London, W.1.

For soap and soap powder (3)
LAUNDRETTA, 725,364, by J. Evershed & Son, Ltd., Shoreham-by-Sea, Sussex.

For all goods (3)
PERALBA, 726,725, by Laporte Chemicals, Ltd., London, W.1.

For all goods (5)
SYMPATOL, ACEDICON, VISADRON, 716,079-81 and 83, by C. H. Boehringer Sohn, Ingelheim-am-Rhein, Germany. BIRONA, 724,911, by Harker Stagg, Ltd., London, E.1. CREMOBENEMID, MAINTINETS, 726,955-56, by Sharp & Dohme, Ltd., Hoddesdon, Herts, GLYBARBATE, 727,009, by Calmic, Ltd., Crewe, Ches. HELMEZINE, 727,146, by Allen & Hanburys, Ltd., London, E.2. SONABEN, 727,282, by C. L. Bencard, Ltd., London, S.W.1.

For deodorants and anti-moth preparations (5)
SCENTINEL, 722,062, by New Hygiene, Ltd., London, N.7.

For pharmaceutical preparations (5)
PARYTMID, 725,829, by Aktiebolaget Bofors, Bofors, Sweden. HEPTALEX, 726,671, by Neodrog, Courbevoie, Seine, France. KEMAZOIDS, 726,696, by British Chemotheutic Products, Ltd., Bradford, Yorks. ELECTROCORT, ELECTROCORTEN, 726,922-23, by Ciba, Ltd., Basle, Switzerland. ARBUNOX, VESAGEX, 727,218-19, by Willows Francis Pharmaceutical Products, Ltd., London, E.8. YORALIT, 727,395, by Wynlit Laboratories, Ltd., London, W.8.

For fungicides and insecticides (5)
VIXATOL, VIXLA, 726,572-73, by Vitax, Ltd., Ormskirk, Lancs.

For vermicides (5)
VELARDON, 726,962, by Organon Laboratories, Ltd., London, W.C.2.

For veterinary preparations (5)
CANINOVAC, 727,275, by International Serum Co., Ltd., London, N.W.7.

For scientific and photographic apparatus and instruments (9)
OPALAX, 725,751, by Crayonne, Ltd., Bexley, Kent.

For hot water bottles (21)
SLEEPYHEAD, 727,220, by William Freeman & Co., Ltd., Barnsley, Yorks.

COMING EVENTS

Wednesday, April 21

ABERDEEN AND NORTH-EASTERN SCOTTISH and DUNDEE AND EASTERN SCOTTISH BRANCHES, PHARMACEUTICAL SOCIETY, Park Hotel, Montrose, at 5.30 for 6.30 p.m. Joint meeting. Mr. C. W. Macfarlane on "Pharmaceutical Philosophy, Philanthropy and Finance"; Mr. J. Jolly on "N.H.S. Matters"; Mr. Taylor on "The Pharmacist and the Health of the Community"; Mr. W. R. L. Brown on "The Apprentice Master and the Post-graduate Apprentice."

LIVERPOOL CHEMISTS' ASSOCIATION and BRANCH, Crane Theatre, Hanover Street, at 7 p.m. East Wavertree Players presenting "The Mortimer Touch" in aid of the Society's Benevolent Fund. Ticket 5s. from Mr. E. A. Briggs, 255 Woolton Road, Liverpool, 15.

SHEFFIELD BRANCH, PHARMACEUTICAL SOCIETY, Grand Hotel, Sheffield, at 7.45 p.m. Meeting to appoint representatives and discuss resolution for the Branch Representatives' meeting in London in May.

Advance Information

GUILD OF PUBLIC PHARMACISTS is holding its annual meeting in London on May 29. Items for the agenda to be sent to branch secretaries before May 1.

C. & D. WEEKLY LIST OF PRICE CHANGES

A=Advanced; R=Reduced; I.R.P.=Inclusive Retail Price; *=Tax 25 per cent.; †=Tax 75 per cent.

C. L. BENCARD, LTD. (correction)

		Doz.	I.R.P.	
Benazma,	8 oz.	84 0	11 1	A
	20 oz.	200 0	26 5	A
	80 oz.	780 0	102 11	A

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD.

Entramin premix, 4 2-oz. containers	13 9	R
2½-lb. container	50 0	R

P.A.T.A. PROTECTED LIST

(Prices notified this week by the Proprietary Articles Trade Association).

ADVANCE INDUSTRIES, LTD. (addition).

	Doz.	
Dis-Pel	31 6	3 6
Dip	15 9	1 9

CRYSTAL PRODUCTS CO., LTD. (additions)

Outdoor Girl skin cream†	6 2	1 2
dry skin cream†	6 2	1 2
beauty mask†	4 0	9

EVANS MEDICAL SUPPLIES, LTD.

E.D.P.*		16 0	2 4	A
Hepatex oral,	4 fl. oz.	132 0	14 8	A
Heprona,	4 fl. oz.	46 0	5 9	A
	40 fl. oz.	290 0	36 3	A
Medisoap*, Nos. 18 and 19		13 9	1 11	A
Purgoids*,	25	12 0	1 9	A
	100	29 6	4 4	A

HENRY C. MINER, LTD. (additions)

Lipstick Duo†	12 0	2 3
Cheek Stik†	5 6	1 0
Deodorant stick†	10 10	2 0
Talcs†	10 10	2 0
Silky hand cream†	6 2	1 2

R. J. REUTER CO., LTD. (Agents, Scott & Bowne, Ltd.) (addition)

4711 solid lavender†, No. 7206	25 10	4 6

SCOTT & TURNER, LTD. (correction)

Delrosa rose hip syrup, 12 oz.	33 9	3 9

TEUCER, LTD. (additions)

Terp-Hyd-Roin (T.P.N.) elixir*	18 0	2 6
	32 6	4 6
	61 0	8 6
pastilles*	18 0	2 6
Adiposin tablets*	30 0	4 6
	58 0	8 6
Bismopepton*, elixir	22 6	3 6
tablets	30 0	4 6
Dermozyl ointment*	22 6	3 6
Optalmax lotion*	22 6	3 6
Pilex*, ointment	22 6	3 6
tablets	30 0	4 6
Vitonin*, elixir	18 0	2 6
	30 0	4 6
tablets	30 0	4 6

TAMPAX, LTD. (addition)

Cerumol, 10-c.c. vial with dropper	31 6	3 6
2 oz.	67 6	7 6
10 oz.	252 0	28 0

NEW PRODUCTS AND PACKS

G. T. FULFORD CO., LTD.

	Doz.	
Handjoy	13 0	2 6

DAVID GRIFFIN, LTD.

Dee Gee electric safety blanket, bed-size	115 0
cot-size	49 0
control unit for either	83 0
flex and plug for car connection	3 0

E. GRIFFITHS HUGHES, LTD.

Tru-gel hairdressing†	15 0	2 9

GROVEWELL, LTD.

Cot sheet	2 0

HAND-GRIPS

Handi-grips, 15	6

MORNY, LTD.

French Fern after shaving lotion†, 2-oz. bottle	3 6

PHARMACEUTICAL SPECIALITIES (MAY & BAKER), LTD.

Entramin capsules, 100 mgm., 25	6 0
100	20 0

RIKER LABORATORIES, LTD.

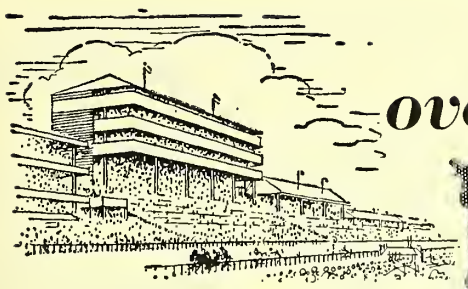
Merbentyl tablets, 10 mgm., 50	7 6
250	24 0
Merbentyl with phenobarbitone tablets*, 50	9 6
250	28 6

C. & D. RETAIL AND DISPENSING PRICE LIST

The drug index for March 1954 was 195·5

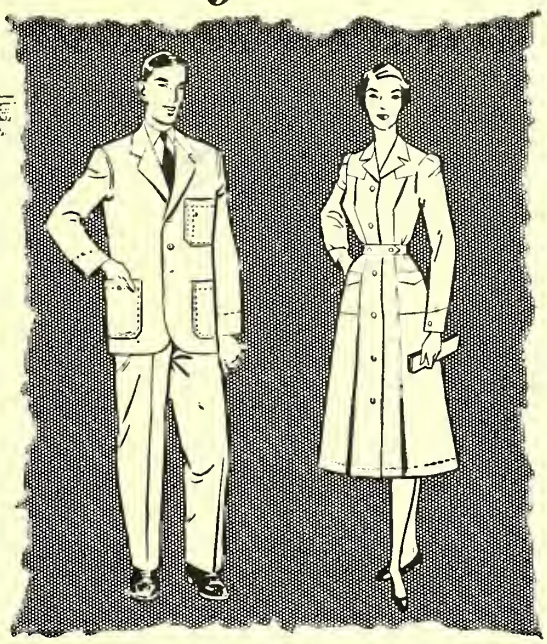
Cost d.	per	Item	Poison Class	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
138	5 gm.	Atropin. methylnitras	S.1. (4)	per	gr.	0 4½
112	5 gm.	Atropin. sulphas		per	gr.	0 4
83	100 gm.	Caffeinæ citras		—	3 4	0 6
83	250 gm.	Capsici fructus pulvis		5 3	1 6	0 3
41	100 gm.	Caryophyllum Zanzibar		—	1 8	0 3
135	250 gm.	Conspers. hydrarg. subchlor. co.		8 6	2 6	0 4½
36	0.5 gm.	Homatropina	S.1. (4)	per	gr.	1 0
36	1 gm.	Homatropin. hydrobromid.	S.1. (4)	per	gr.	0 8
129	100 gm.	Hyd. subchloridum		—	5 3	0 9
127	100 gm.	Hyd. ammoniatum		—	5 2	0 9
24	25 gm.	Ol. anisi.		—	4 0	0 7
39	25 gm.	Ol. cajuputi		—	6 6	1 0
240	500 gm.	Ol. theobromatis		7 10	2 5	0 4
108	25 gm.	Opium pulveratum	D.D.	—	—	2 10
51	500 gm.	Potassii chloras		1 2	0 4	0 1
126	500 gm.	Sodii et lauryl. sulphas		4 1	1 1	0 2
192	500 gm.	Ung. hyd. subchloridi		6 3	1 10	0 3
57	500 gm.	Zingib. rhiz. Jam		1 11	0 7	0 1
75	500 gm.	Zingib. rhiz. Jam. pulv.		2 5	0 8	0 1

Biologicals	Poison Class	Strength	Cost d.	per	Selling s	d.
Insulin zinc suspension, amorphous or crystalline.		400 units	47	each	5	10½
		800 units	89	each	11	1½
Penicillin (crystalline)		0.2-mega	9	each	1	1½
Penicillin (crystalline)		0.5-mega	14	each	1	9
Penicillin (crystalline)		1-mega	21	each	2	7½
Penicillin inject. oily		300,000 units	76	10 mil.	9	6
Penicillin inject. c. procain	(aqueous suspension) P.I.	300,000 units per mil.	76	10 mil.	9	6
Penicillin c. procain.	P.I.	900,000 units	23	each	2	10½



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Epsom for salts — and Derby winners on the famous Downs... Epsom, then, for remedies and racing, too... But Gardiner's for Overalls — protective clothing on which all Chemists, Druggists and Assistants can safely place their stakes... The "salt" of anything is symbolic of the best... Gardiner's Overalls are Epsom-salty in their quality and winners in the "Classic" sense.



Ladies' Rayon Overalls. *Style No. C.65. Colours Mid and Light-Green, Pink, Light Blue, Cream, Maroon, Navy, Beige and White. SW* **28/9**, *W* **30/-**, *WX* **31/11**, *OS* **33/11.**

Men's White Jackets. *Style No. C.44. 34" to 46" chest. Step collar. 3 pockets, 3 buttons,* **20/-.**
Post orders 1/- extra.

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Illustrated is our No. 750 Pure Bristle, double-sided nailbrush which retails at only 3/11d. Other nailbrushes in Bristle, Nylon or Fibre at popular prices. Write now for new price list.

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GET READY TO SELL THIS HANDY HOLIDAY FAVOURITE!

An attractive idea for the holiday-maker, the pack contains toothbrush, toilet soap and face cloth. Sealed in cellophane ready for immediate sale at only 2/11d.

THE HYGEX 'FORGET-ME-NOT' PACK WILL WIN MORE FRIENDS THIS YEAR, TOO!

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GUM TRAGACANTH
GUM KARAYA
WHOLE AND POWDERED
DIRECT IMPORTERS

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M. HAMBURGER & SONS LTD
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SOREXA 5 11b 13/6
(makes 20lbs. bait for rats and mice).
SOREXA WARFARIN BAIT
(ready to use) (1lb 3/6, 3lb 8/-, 7lb 16/-)
SOREXA 1 11b 7/-
(makes 20lbs bait for common rats).
FULL TRADE DISCOUNTS

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Warfarin
rat bait

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OVER 150 YEARS REPUTATION
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THE ORIGINAL
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'Harley'



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TRADE DISCOUNT 33⅓%

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WAGNER'S
DRY AUTOMATIC
Best in quality and appearance
PROMPT DELIVERIES

R. V. WAGNER Bushey Hall Garage, Bushey Hall Road Watford, Herts

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WE WANT MILLAMALT



Sole Manufacturers:
JEFFREYS, MILLER & CO. LTD., *Leyland Mills, Wigan (London Department 19 Brookside Rd. N.)*

BECAUSE OF THE BUTTERSCOTCH FLAVOUR

A FREE WINDOW DISPLAY TO HELP YOU SELL MORE

AURORAL
COLD WATER DYES

In 30 popular shades. Counter Display Cabinet supplied with one gross on request.

48/- gross: Retail 6d. pkt. (P.A.T.A.) Less 5% for cash in 7 days

These dyes carry a bigger profit margin than others and now, to help you sell more, we offer, free of charge, a Special Window Display dressed by specialists. This, with our extensive advertising in women's magazines, can mean record sales for you this Season. Write at once to:

LUTON
STRAW HAT DYES

Standard range of twelve colours. Dull or glossy series; supplied complete with brushes for applying the dye.

Large size 18/- per doz. Retail (P.A.T.A.) 2/- per bottle
Small size 13/6 „ „ „ „ 1/6 „ „
Less 5% for cash in 7 days

WHITAKER & CO. (KENDAL) LTD.
DYE AND CHEMICAL MANUFACTURERS — KENDAL

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and all other Botanicals, Gums, Waxes, Essential Oils and Spices

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Distillers of ESSENTIAL OILS *since 1923*

Manufacturers of AROMATICS, PERFUME BASES AND FLAVOURS.

We specialise in CINNAMON BARK OIL, JUNIPER BERRY OIL, WINTERGREEN OIL, FRENCH LAVENDER OIL, TERPENELESS LEMON OIL, PEPPERMINT OILS, PERFUME BASES, ETC.

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—The new accessory that every Motorist wants!

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★ Makers of the world-famous 'SUNGARD' Sunglasses

"Sweetheart" "Drinkrite"
DRINKING STRAWS
special **SMALL PACKS** of 25, 50 and 100 straws.
Order now and **INSIST** on these brands for **QUALITY.**
HYGIENIC DRINKING STRAWS CO. LTD.,
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Wimzo ALWAYS MEANS CLEAN HANDS
ASK YOUR WHOLESALER, OR WRITE:
WIMSOL LTD., KEIGHLEY, FOR TERMS

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Something they can trust

The public likes something reliable, something with dependable high quality. A faithful following is the public's response to trustworthy products that give real satisfaction. Such is the popularity of

CUTICURA SOAP
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There is a growing circle of discriminating people who appreciate high quality and insist on these soothing, protective, fragrant, mildly medicated Preparations, for care of the skin. Just display one each of these eye-catching firm family favourites in your attractive window, and make sure this steady all-the-year-round business comes your way.

CUTICURA SOAPS, OINTMENTS AND SHAVING STICKS HAVE ALWAYS CONTAINED CHLOROPHYLL

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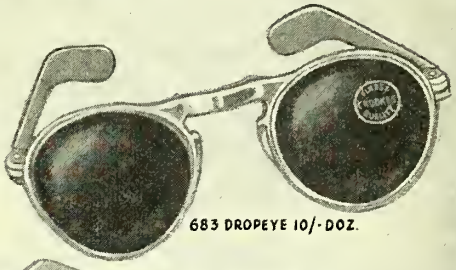


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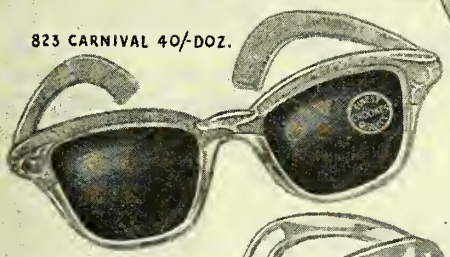
SUN GLASSES FOR 1954

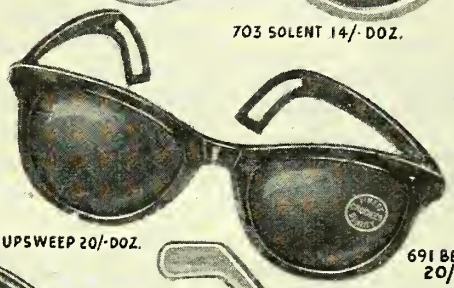


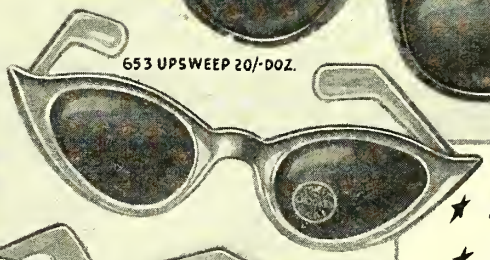

860 KIDDIES 10/-DOZ.


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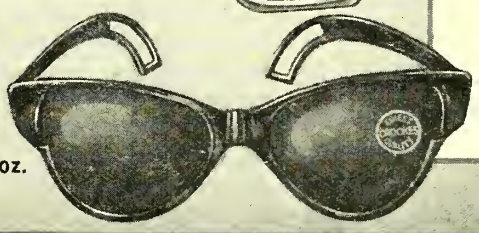

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★ NEW DISPLAY AIDS.
FROM YOUR WHOLESALER
NOW!

JARRETT RAINSFORD & LAUGHTON LTD.
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LONDON: 100 DEAN ST. W.1. (Gerrard 3473) MANCHESTER: 13 MARSDEN SQ. (Blackpiers 8401) GLASGOW: 60 ST. ENOCHS SQ.
Stands M61, M62 & M63 B.I.F. Olympia



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Andrews has the largest sale of any effervescing saline in the world. This is because :—

- The public have confidence in it.
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Sell only genuine



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ELASTIC NET STOCKINGS

Real Lastonet stockings are always made to measure to ensure a perfect fit. Customers also prefer the feather-weight net which is cool, and stretches in all directions for firm even support. Lastonet discounts, too, are particularly generous! Send today for supply of measurement forms and display material to participate in this brisk trade.

* **Guaranteed for 6 months**
* **Supplied with ordinary National Health prescription**

LASTONET PRODUCTS LIMITED, CARN BREA, REDRUTH, CORNWALL

Always made to measure

A REALLY CONVENIENT PACK 1/6

PER SCREW LID TIN

NO MORE PRISING OFF LIDS WITH A THREEPENNY BIT OR FINGER NAILS!



Jelly Hand Cleansers are rapidly coming into regular use—sell the best and most attractively packed of all

EVERYONE NEEDS SWARFEGA

The finest jelly hand cleanser on the market

ORDER NOW *and be sure to ask for the* ***NEW PACK***

Enquiries through usual trade channels or direct to—

DEB CHEMICAL PROPRIETARIES LTD.
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The original antipyocyanea compound with its developing use as a special preservative and antiseptic for penicillin creams, anti-burn ointments and pharmaceutical-medicinal preparations.

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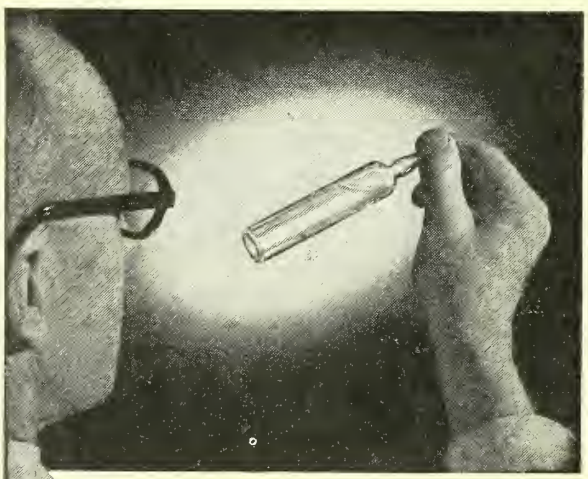
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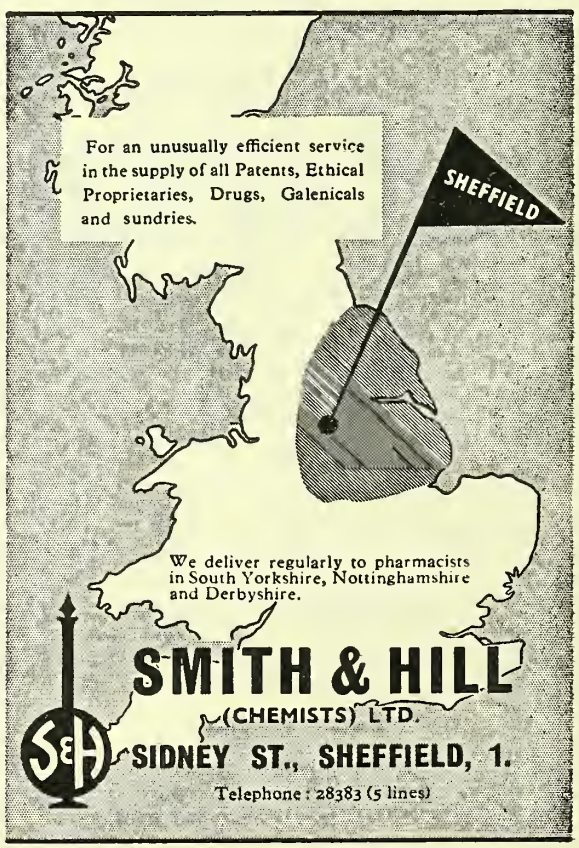
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LOOPED ENDS
NON-ABSORBENT BACK

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Ask your Wholesaler for them

FIRST IN PUBLIC DEMAND

'HALO'

REGD.

THE WORLD'S FINEST HAIR NETS

There's confidence in "Halo" built on the unvarying quality and economy of the hair nets which bear a guarantee. Priced to meet today's conditions and packed to make for easy selling "Halo" will bring you steady, profitable business.

Illustrated — "Halo" Nylon No. 43 in printed transparent envelope, packed 4 dozen on Hanging Card. "Halo" No. 33 Pure Silk nets are similarly packed but with a different colour scheme.

Manufactured by:—
BYARD MANUFACTURING CO., LTD., NOTTINGHAM

★ ★ ★



Have you seen THIS

new beautifully designed show card size 23" x 17½" in 6 bright colours?

Supplied with two side panels each 17" x 10½" the whole making an attractive window display, or can be used separately as counter show cards.

NOW IS THE TIME

to make a window display and ensure a steady flow of repeat orders for

"AUTUMN SUN,"

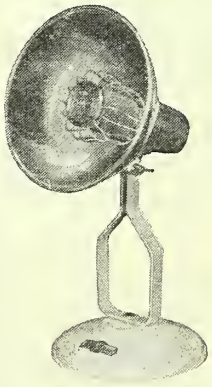
the Malt and Oil with the taking flavour.

The complete set is FREE; ask our representative or write direct, sent post free.

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IMPERIAL HOUSE
84-86, REGENT STREET, LONDON, W.1.
Works: Mistley, Essex.

SOL-TAN

Relief from Pain!



'SOL-TAN'

Cat. No. E.M. 39 P.

This attractively finished model is finished in Ivory or Eau-de-Nil. Reflector dia. 9½". Height 16". Burner No. 2 L.W. 250 Watt or No. 2 M.W. 400 Watt. Supplied complete with Treatment Instructions.

List Price
£3.10.0 Tax Free
Spare Burners 13/9 each

Cat. No. EM40P Fitted with 7" Diameter Reflector specially designed for Local Application. List Price £3 . 2 . 6 Tax Free.

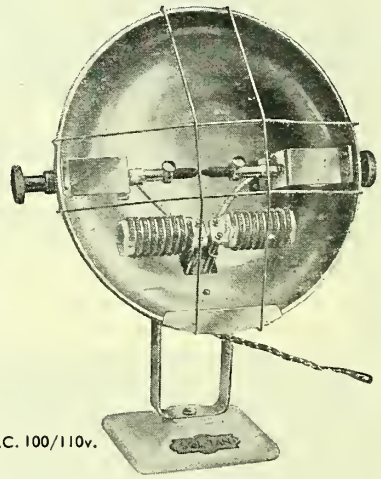
Switch on to Sunshine!

'SOLTAN' CARBON ARC

Cat. No. E.M. 101

Gives rich Ultra-Violet Rays as midday Summer sunshine, invaluable in maintaining health and physical fitness.

List Price
£5 . 15 . 0
Plus P.T.
Operated on A.C. and D.C. 100/110v. 200/220v. 230/250v.



Only supplied against Doctor's certificate or for professional use

Fully illustrated Catalogue gladly sent on request. **'Sol-Tan' Marketed for Home and Export by:—**

THE LONDON COMMERCIAL ELECTRICAL STORES LTD
20-23 CURSITOR STREET, E.C.4. • CHANCERY 6488/9

Sell more soap at 10D

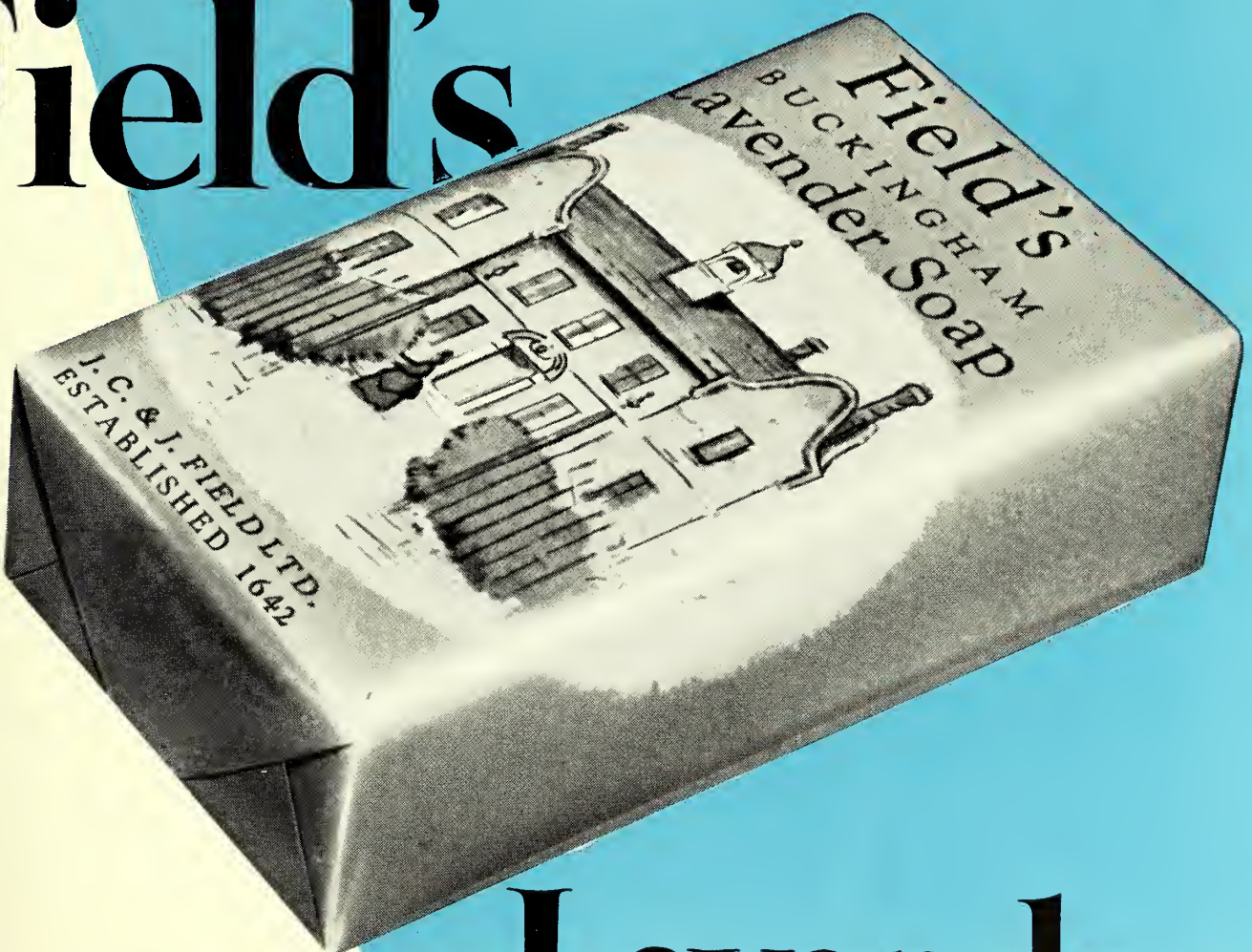
and increase turnover

The quickest and easiest way to increase your turnover by 66 per cent is to sell 10d. soap instead of 6d. soap.

No soap at 10d. is easier to sell than Field's. It is full of very strong, very fresh lavender perfume. It is supported by more and more powerful, full-colour full page advertisements. It is most attractively packed.

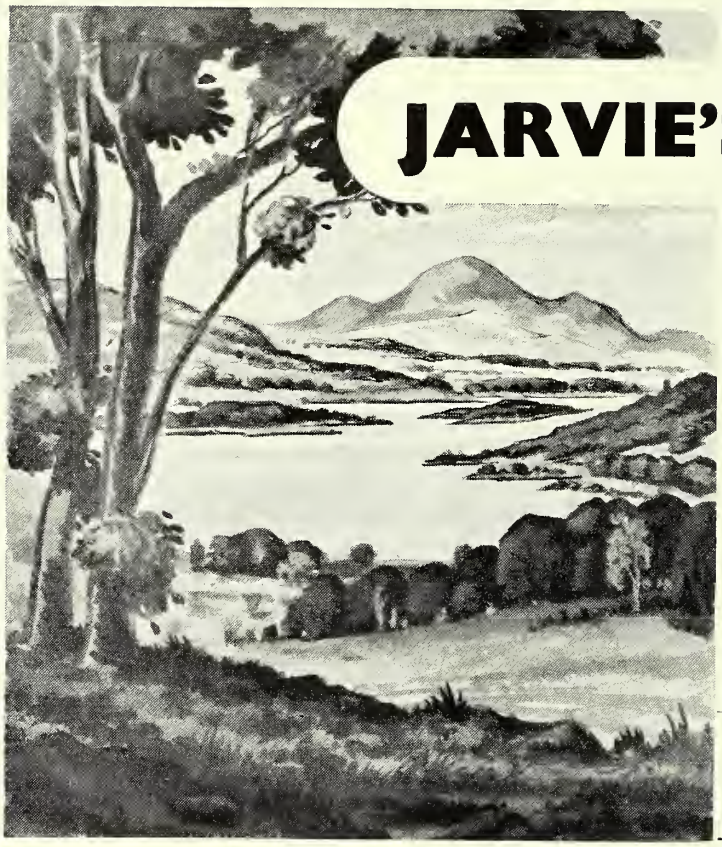
Display Field's and increase your turnover.

Field's



BUCKINGHAM Lavender

MERSHAM BUCKINGHAMSHIRE · FIELD'S ESTABLISHED 1642 · 162 NEW BOND ST. LONDON W1



JARVIE'S QUININE

Only the clear waters of Scottish Lochs are used in the crystallization of Jarvie's Quinine Salts

H. JARVIE & Co. Ltd.
SCOTIA CHEMICAL WORKS
COATBRIDGE
SCOTLAND

EXPORT ENQUIRIES TO:—
H. JARVIE & CO., LTD.
Wigmore House, 10 Duke Street,
Est. 1892 ***London, W.1***

Dr. J. Collis Browne's Chlorodyne
and
The Pharmacy and Poisons Act, 1933

Dr. J. Collis Browne's CHLORODYNE

SALE RESTRICTED TO REGISTERED CHEMISTS

PURCHASER'S SIGNATURE NOT REQUIRED

P.A.T.A.

Sole Proprietors:
J. T. DAVENPORT LTD.
UNION STREET - LONDON, S.E.1

"HANDYLINE"

SERIES

This series has been designed as a general purpose line, being equally suitable for a large range of medicinal, household and toilet packs, requiring wide neck finish. Moulds are in an advanced stage for 1, 2, 3, 4, 6 and 8 oz. sizes.



THE INTERNATIONAL BOTTLE CO LTD

PHONE
MAYFAIR 6992
(5 LINES)

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GRAMS:
AUTREFOIS, AUDLEY
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Designers & manufacturers of high quality glassware



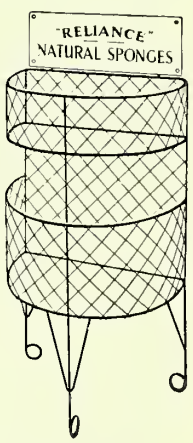
Requested everywhere - naturally

MORE AND MORE PEOPLE ARE REALISING THAT NO SUBSTITUTE CAN EQUAL THE QUALITIES OF A NATURAL DEEP SEA SPONGE

NATURAL deep sea sponges are softer, kinder to the skin, more hygienic and hold three times more water than any substitute. More and more of your customers are realising this every day. That is why to display natural sponges is to SELL THEM!

CRESSWELL'S have been in the Sponge Trade for more than 150 years, and as the largest bulk buyers of Natural Sea Sponges Cresswells get THE BEST WHEN THE SPONGE CROP IS FISHED.

Varied assortments of popular priced RELIANCE Honeycomb and Fine Turkey Sponges are now available. Sponges are transparent wrapped if required. Please write for price lists and details — or for our Representative to call.



FREE TO STOCKISTS

This attractive special Display Basket, 3 feet high, is free on request to all Stockists of "RELIANCE" Sponges. Made of strong metal mesh and finished in high gloss Royal Blue, it makes a very attractive and robust display stand.

CRESSWELL BROS. SPONGES

RELIANCE FINEST QUALITY SPONGE

(World Natural Sponge Suppliers Ltd.)

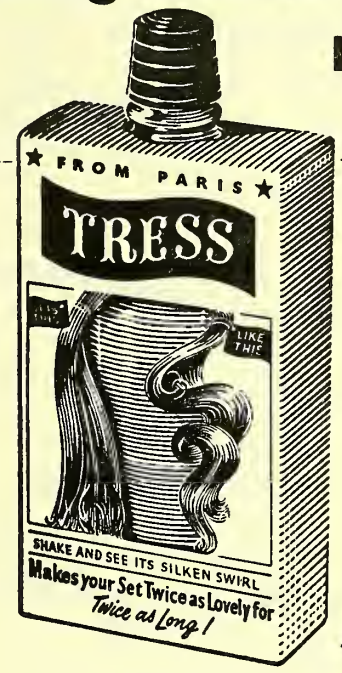
Largest Processors and Stockists of Natural Sea Sponges in the World

International Building, Buck Street, Camden Town, London, N.W.1.

Phone: GULliver 5462-3. *Telegrams: Sponge, Norwest, London.*

An entirely *New Market* is being created by these fast-selling

L'OREAL HAIR BEAUTY PRODUCTS





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TRADE PRICE 14/4d. per doz.
75% Tax
RETAIL PRICE 2/8d. per bottle

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TRADE PRICE 6/2½d. per doz. cards
75% Tax
RETAIL PRICE 1/2d. per card of two rinses



ARE YOU CASHING IN ON THEM?

Marketed by GOLDEN LTD · 2/4 DEAN STREET LONDON W1 Ger. 4926



By Appointment to the late King George VI

NEW! TWO CUPS*

for Quart size THERMOS Brand Vacuum Flasks at no additional cost!

* Another good reason why IT PAYS YOU TO SELL THERMOS

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SURGICAL ELASTIC HOSIERY

SEAMED. SEAMLESS.
TWO-WAY STRETCH.
ELASTIC NET.

SURGICAL BELTS
TRUSSES AND SUNDRIES

Over 60 years' service of everything surgical

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KILLS WOODWORM

Record sales have proved the public's appreciation of RENTOKIL TIMBER FLUID. ALWAYS hold adequate stocks of this outstanding woodworm preventive. Retails at 2/-, 3/3, 5/9, 9/6 and in bulk.



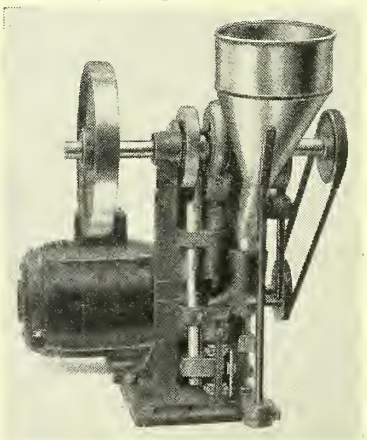
Increased Value!

Complete outfit, comprising 16 oz. tin and Injector as illus. 10/6d.

RENTOKIL LTD. (Dept. C.D.) Fetcham, Leatherhead, Surrey.
Tel: Leatherhead 4021/2

Single Punch Tablet Machine

Up to ½" diameter



80 to 100 TABLETS PER MINUTE

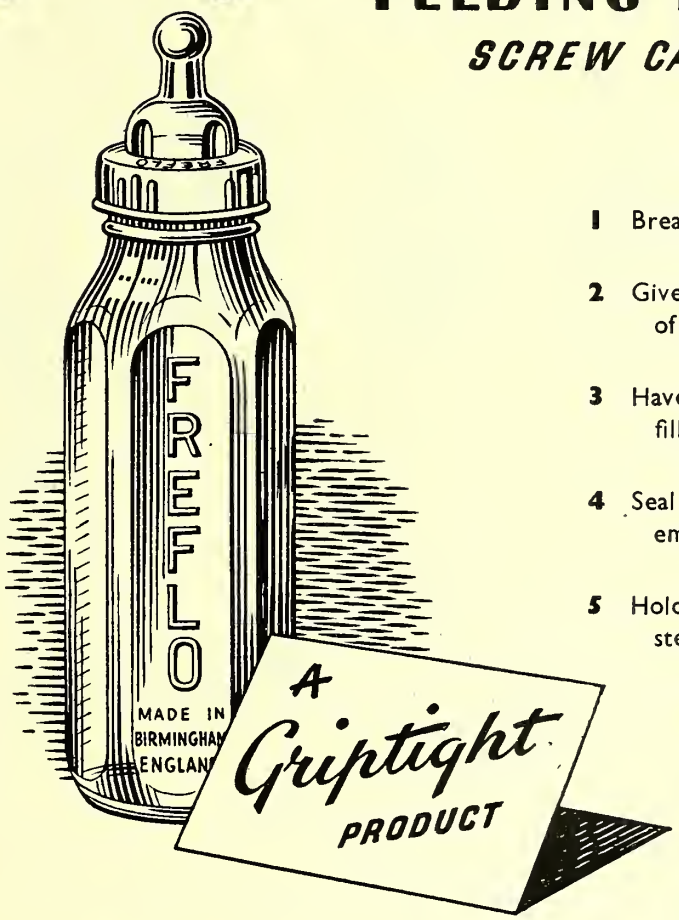
HAND TABLET CUTTERS · TINCTURE PRESSES
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FEEDING BOTTLES

SCREW CAP TYPE



1 Breathe as they feed.

2 Give an uninterrupted flow of milk.

3 Have a wide mouth for filling.

4 Seal hermetically, filled or empty.

5 Hold teat covered and sterile when not in use.

6 Store prepared feeds for later use.

MADE IN BIRMINGHAM · ENGLAND

LEWIS WOOLF LTD.

144 OAKFIELD ROAD, SELLY OAK, BIRMINGHAM, 29

Look what's coming!

Now choose from the

New Toni Trio

the one made specially for your type of hair!



SIMPLER PROCESS—
WAVES ALL TYPES OF
HAIR IN 15 MINUTES!

* NO CHECK CURLS!
Just choose the Toni with the waving lotion for *your* type of hair

* ONE FIXED WAVING TIME!
No variations — no ifs and buts — regardless of your type of hair.

* WAVES IN 15 MINUTES!
and we mean 15 minutes exactly — no more, no less — for *all* types of hair.



Toni Super
FOR HARD-TO-WAVE HAIR
If other perms don't take or last, Toni *Super* is your answer. Also recommended for women who want a tighter perm.

Toni Regular
FOR NORMAL HAIR
Perfect for most women. Toni *Regular* is made specially to give a livelier, livelier, more natural-looking wave to normal hair.

Toni Gentle
FOR EASY-TO-WAVE HAIR
Or for hair that is bleached, dyed or tinted. Also choose Toni Gentle if you prefer loose waves or if your hair has some natural curl.

YOUR CHOICE OF Toni REFILLS 9/- ONE'S A NATURAL FOR YOU!

Remember, Self-timing Toni is a new process. So read the new instruction leaflet carefully before perming.

TONI COSMETICS LIMITED, HARLEQUIN AVENUE, BRENTFORD, MIDDLESEX

This half page in the

DAILY EXPRESS

Thursday, May 6th

followed by large, dominating advertisements in the national press and women's magazines . . . in colour and black and white !

Be ready to STOCK and DISPLAY

New Toni Trio

to ensure your share of the rising profits !

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The CHEMIST AND DRUGGIST
CLASSIFIED ADVERTISEMENTS
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S. W. LONDON. Beautifully fitted lock-up chemists with increasing pharmacy trade. Long lease at low rent. Takings approx. £100 p.w. Exceptional opportunity. Apply Beresfords, 4 St. James's Street, S.W.1. Trafalgar 7353/2992. C 1164

WELL-KNOWN FIRM of chemists' sundriesmen in Midlands for sale as going concern owing to ill-health. Large connection. Inquiries in first instance to Box C 1161.

WORTHING, SUSSEX. Chemists, old-established. Main street, town centre. Deep shop, 8 rooms, bath, workshop, etc. Age causes sale. Offers invited for freehold and stock only. Must sell. Apply Symmons & Polden, Surveyors, etc., 13 Liverpool Gardens, Worthing. Tel.: 5744. C 1179

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18/- per half-inch (min.) and pro rata. Box 2/-

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Assistant in Dispensing

required. Whitley Council conditions of service. Applications stating age and experience, together with the names and addresses of two referees, should be addressed to the undersigned.

JOHN H. DAFFORNE,
General Superintendent.
C 6834

COUNTY HOSPITAL, LINCOLN
Locum Pharmacist

required at the County Hospital, Lincoln. Salary £14 14s. per week. Apply with full particulars to the Group Pharmacist, County Hospital, Lincoln. C 6761

FULHAM HOSPITAL, ST. DUNSTANS ROAD, HAMMERSMITH, W.6 (HOSPITAL OF FULHAM AND KENSINGTON GROUP)
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required immediately for period of two months. Salary 14 guineas weekly. Applications to Hospital Secretary (C.D.185) immediately. (Riv. 5407). C 6825

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Dispenser

required to work three-quarters of full-time, assisting Chief Pharmacist. National salary. Applications giving qualifications and experience, with copies of testimonials to Hospital Secretary. C 6803

HALIFAX AREA HOSPITALS MANAGEMENT COMMITTEE
Assistant in Dispensing

Applications invited for post of Assistant in Dispensing at the Royal Halifax Infirmary. Preference will be given to candidates possessing the Certificate of Society of Apothecaries or equivalent qualification. Salary £320 rising to £415 per annum at age 22 and over with additional £15 per annum for recognised qualification. Applications with names and addresses of two persons to whom reference may be made, to be forwarded to the Group Secretary, Royal Halifax Infirmary, Halifax. C 6846

MILLER GENERAL HOSPITAL (Cat. III)
Senior Pharmacist and Pharmacist

Applications are invited for the posts of Senior Pharmacist and Pharmacist in a well-equipped pharmaceutical department at the above hospital. Inspection of the department may be made by arrangement with Chief Pharmacist. Salary and conditions of service as laid down by the Pharmaceutical Whitley Council. Applications giving full details should be made to the Secretary, G. & D./H.M.C., St. Alfege's Hospital, S.E.10, as soon as possible. C 6824

MILLER GENERAL HOSPITAL, GREENWICH, S.E.10 (180 Beds)
Assistant in Dispensing

required at above hospital. Salary according to age and experience (max. £415 p.a. at 29 years) plus London Weighting and qualification allowance if over 18 years. Superannuable post. Apply Chief Pharmacist. (Tel.: Tideway 1136). C 6826

NATIONAL HEALTH SERVICE JOINT PRICING COMMITTEE FOR ENGLAND
Deputy Superintendents

Owing to expansion of the Pricing Service at Newcastle and to the retirement of the Superintendent at Birmingham, there are vacancies for Deputy Superintendents at both places. Both pharmaceutical and administrative experience are desirable and the successful applicants will be required to assist the Superintendent to control and obtain the best results from a large female staff, and to assist in resolving the many technical problems which arise in the pricing of National Health Service prescriptions.

The salary will be at the rate of £610 per annum rising by annual increments of £25 to a maximum of £735 per annum, and will be subject to the Superannuation Regulations.

Applications giving full details of career to date should reach the Clerk, Joint Pricing Committee for England, 38 Northumberland Street, Newcastle-upon-Tyne, not later than April 30, 1954.

38 Northumberland Street,
Newcastle-upon-Tyne, 1.
April 7, 1954. C 6841

ROYAL FREE HOSPITAL GROUP
Locum Pharmacists

required for holiday relief and other duties. Salary £14 14s. per week. Applications, together with names of two referees, should be addresssed to Group Chief Pharmacist, Royal Free Hospital, Gray's Inn Road, London, W.C.1. C 6845

SPRINGFIELD HOSPITAL, UPPER TOOTING, S.W.17
Locum Pharmacist

immediate vacancy, 14 gns. per week. Apply stating age, qualifications, and experience to Group Secretary. C 6861

ST. BERNARD'S HOSPITAL FOR NERVOUS AND MENTAL DISORDERS, SOUTHALL, MIDDLESEX
Pharmacist

required at St. Bernard's Hospital for Nervous and Mental Disorders, Southall, Middlesex. Whitley Council salary (£450 x £25 to £575, plus London Weighting), and conditions will apply. The post is subject to the National Health Service Superannuation Regulations. No house available. Application forms obtainable from the Physician Superintendent. C 6852

ST. OLAVE'S HOSPITAL, LOWER ROAD, S.E.16
Locum Pharmacist

required for several months at the above hospital. Salary £14 14s. per week. Apply by letter with full details to Secretary. C 6851

ST. STEPHEN'S HOSPITAL, CHELSEA, S.W.10
Assistant-in-Dispensing

Technician required for manufacture of sterile solutions, etc. Previous experience desirable. Salary £7 7s. weekly, or on Whitley scale. Apply Chief Pharmacist. C 6795

SUMMERFIELD HOSPITAL, WESTERN ROAD, BIRMINGHAM, 18
Pharmacist

required at this Chronic Sick Hospital. Salary and conditions as prescribed by the Pharmaceutical Whitley Council. Detailed applications, giving names of two referees, to the Hospital Secretary. C 6863

THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND STREET, LONDON, W.C.1
Pharmacist

Applications are invited for the post of pharmacist at this hospital. Salary within the Pharmaceutical Whitley Council Scale (£450 x £25—£575) plus London Weighting, £25 for recognised higher qualification. Apply by letter to Chief Pharmacist. C 166

THE LONDON HOSPITAL, WHITECHAPEL, LONDON, E.1
Locum Registered Pharmacists

required from mid-April to mid-October 1954. Dining-room facilities available. Write Secretary. C 186

THE LONDON HOSPITAL, WHITECHAPEL, LONDON, E.1
Pharmacist

Applicants must be registered Pharmacists. Salary scale £450 (age 23) x £25 to £575 plus London Weighting according to previous experience and service. Dining-room facilities available. Write Secretary. C 179

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41 ARGYLE SQUARE, KING'S CROSS, W.C.1

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Wanted immediately good class businesses in London, Home Counties and South Coast. Private clients waiting with cash up to £10,000.

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IMPORTANT

Box Office numbers are intended exclusively for specific answers to particular advertisements. Price Lists, Trade Circulars, Samples and Printed Matter cannot be forwarded.

Appointments—Continued

UPTON HOSPITAL, SLOUGH, BUCKS
Locum Senior Pharmacist
required from May 5. Salary £14 14s. per week. Application to Hospital Secretary. C 6760

YORK "A" AND TADCASTER HOSPITAL MANAGEMENT COMMITTEE
Assistant in Dispensing
required for County Hospital, York. Salary according to age—maximum commencing salary £320 p.a. at age 22 or over. An additional £15 p.a. is payable to holders of the Certificate of the Association of Apothecaries. Apply giving age, qualifications, experience and two referees to the Secretary, Bootham Park, York. C 6850

SITUATIONS OPEN

8/6 for 36 words (min.) then 3d. per word. Box 2/-

The engagement of persons answering these advertisements must be made through a Local Office of the Ministry of Labour or a Scheduled Employment Agency if the applicant is a man aged 18-64 inclusive or a woman aged 18-59 inclusive unless he or she, or the employment, is excepted from the provisions of the Notification of Vacancies Order, 1952.

RETAIL (HOME)

CARDIFF. R. W. Duck & Son, Ltd., have a vacancy for a qualified assistant manager/manageress and an unqualified male assistant for drug department. Apply Manager, St. John Square. C 1176

CENTRAL LONDON. Young lady dispensing assistant required for good class City/West End type of business. Duties mainly dispensing with knowledge of the counter. Good salary, Saturday half-day. Summer holiday with pay this year. No Sunday or rota duties. Apply stating age, and details of experience to Box C 6866.

CHEMIST'S COUNTER ASSISTANT, experienced lady required, pleasant personality. Excellent conditions. Apply Kendale Dispensing Chemists, 51 Exmouth Street, E.C.1. Phone: Terminus 9494. C 6857

ILFORD. Excellent opportunity for energetic pharmacist to manage busy branch in pleasant area. Well fitted shop. Adequate assistance. Modern dispensary. Progressive salary with monthly bonus and rota duty payments. Accommodation available if required. Permanency with pension fund, etc. Apply with full details stating when available for interview to Chief Pharmacist, Grange Road, Leyton, E.10. C 1156

LADY ASSISTANT, unqualified, experienced counter and cosmetics required as soon as possible for well-established pharmacy. Please give all particulars of age, previous experience, salary required to W. C. Ford (Chemists), Ltd., 73 Camden Road, Camden Town, N.W.1. C 1173

LADY PHARMACIST required for dispensing. Apply full particulars to Miss O. M. Wisdom, M.P.S., 117 High St., Tonbridge. C 1170

LONDON. Interesting position offered in leading West-end chemists to unqualified male preferably with surgical experience (F.P.A.). Knowledge of dispensing also an advantage. Commission and optional pension scheme. Apply giving full details to Box C 1180.

LONDON, CENTRAL. Young lady assistants required for toilet department in good-class pharmacy. Part-time and full-time. Permanent positions with good progressive salaries. Saturday half-day. Summer holiday with pay this year. Apply with details of age and experience to Box C 6773.

MIDDLESEX. Pharmacist required to manage spacious well-fitted branch with substantial counter trade. Good opportunity for ambitious man to earn top salary together with monthly bonus and rota duty payments. Accommodation available if required or assistance given in house purchase. Superannuation benefits, etc. Apply with full details stating when available for interview to Chief Pharmacist, Grange Rd., Leyton, E.10. C 1157

QUALIFIED DISPENSER and counterhand required for pharmacy (new West End branch). Good salary and prospects for good all-round man. Apply Box C 1172 or telephone Welbeck 8365 for appointment.

UNQUALIFIED male assistant required for North-east London pharmacy. Dispensing and counter experience and knowledge. Good congenial conditions. No Sunday, holiday or rota duties. High salary for right man. Holiday this year. Land, 448 Kingsland Road, Dalston, E.8. Clissold 8211. C 1171

WANTED: PHARMACIST (male or female) as superintendent. Wages 14 gns. weekly. House rent free. Good hours and conditions. Apply the Garndiffaith & Varteg Co-operative Society, Ltd., Garndiffaith, Mon. C 1110

WEST MIDDLESEX. Unqualified dispensing, photographic and general counter assistant required. Experience suitably rewarded. Alternatively, it is an opportunity for a young person to gain experience. Please give details of experience and state wages required. Davies, Crescent Parade, Hillingdon, Middlesex. Phone: Uxbridge 2006. C 1174

LOCUMS WANTED

ARNOLD M. GEE, LTD., have a vacancy for a pharmacist for locum duties in the South London area. This can be for a period of a few months or a permanency according to the applicant's wishes. If a permanency then superannuation scheme operates. Excellent experience in taking full charge of all types of branches. Undeniable references required. Please give all particulars of age, previous experience, and approximate salary required to the Managing Director, Derwent House, 12 High Street, Colliers Wood, S.W.19. C 1175

LOCUM PHARMACISTS required for London and Suburban areas, long or short periods May to October. Permanency at conclusion of tour if desired. Salary and expenses basis. Apply to H. Warburton, M.P.S., Chief Pharmacist, London Co-operative Chemists, Ltd., Grange Road, Leyton, E.10. C 1158

RETAIL (OVERSEAS)

YOUNG QUALIFIED CHEMIST (lady) required for retail pharmacy Bulawayo, S. Rhodesia. Excellent opportunity for energetic lady. Apply Box C 6840 stating experience and if possible enclose a recent photograph. An interview can be arranged in England.

WHOLESALE

A VACANCY has occurred in the representative staff of a well-known firm dealing solely with hospitals. The territory to be covered is that part of London north of the river and the then adjoining counties. Applications are invited from men of good appearance and education and who should be between 25 and 40. Previous experience in this field an advantage but not essential. Applicants should possess a car or be in a position to purchase one. Good salary, commission and expenses. Full details (in confidence) of past experience, education, etc., to Box C 6864.

ASSEMBLERS, experienced in patents, proprietaries, toilet requisites and sundries required. Excellent scope. Apply Biorex Laboratories, Ltd., 47-51 Exmouth Street (Mkt.), London, E.C.1. Phone: Terminus 9494. C 6856

BIOREX LABORATORIES, LTD.: Sales representative. Due to expansion a larger traveller force is required to call on retail chemists with drugs, galenicals, ethicals, patents, dressings and sundries; pharmacists preferred, car owners with established connection in London and Home Counties; substantial salary, commission and expenses. Apply with full particulars to the Managing Director, 47-51 Exmouth Street (Mkt.), London, E.C.1. C 6858

BIOREX LABORATORIES, LTD. Industrial representative. Due to expansion a larger traveller force is required to call on industrial establishments with drugs, and first-aid appliances, dressings and plasters; car owners, with established connection in London and Home Counties; substantial salary, commission and expenses. Apply with full particulars to the Managing Director, 47-51 Exmouth Street (Mkt.), London, E.C.1. C 6859

CHEMIST, qualified for analytical control, experienced in cosmetics with special reference to shade matching. Five-day week. Non-contributory pension scheme. Send full particulars marked confidential to Production Manager, Richard Hudnut, Ltd., Lane End Road, High Wycombe. C 6862

EVANS MEDICAL SUPPLIES, LTD., have a vacancy for a representative to call on chemists in Gloucestershire. Applicants must be under 35 years of age with recent experience of retail pharmacy. Apply in writing to the Home Sales Director, Evans Medical Supplies, Speke, Liverpool, giving full details of career. C 6801

HAMPSHIRE, medical representative. A well-known house require the services of a man with real interest and a sound pharmaceutical background to take over and expand their present connection on this territory. Previous experience is not essential as every help and training is given. Remuneration is by way of salary, expenses and commission. The position is a pensionable one. Please write in confidence to Box C 6853.

IMPERIAL CHEMICAL INDUSTRIES, LTD., has a vacancy for a veterinary representative who would be required to live in the Midlands. Applicants should preferably be under 35 years of age, hold a pharmaceutical qualification and be able to speak Welsh. Applications with full particulars should be addressed to Imperial Chemical (Pharmaceuticals), Ltd., Office Service Department, Fulshaw Hall, Wilmslow, Manchester. C 6842

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Situations Open—Continued

LABORATORY ASSISTANTS, female, required, some experience of analytical and/or bacteriological control work preferable. Matric. or Inter. standard desirable but not essential. Roussel Laboratories, Ltd., 847 Harrow Road, N.W.10. C 6868

MALE CLERK required for export documentation. Must be good at figures and conversant with metric system; also familiar with D.D.A. and pharmaceutical preparations. Apply Secretary, Roche Products, Ltd., 15 Manchester Sq., W.1. C 6823

MEDICAL REPRESENTATIVES required by London house to visit doctors, hospitals and chemists in the Yorkshire, Northumberland and Durham areas, in Scotland (principal towns from Glasgow to Aberdeen) and also in the Greater London area. Applicants must have a good pharmaceutical background and a knowledge of medical terminology. Men between the ages of 25 and 35 are invited to apply, and details of age, experience and salary required should be stated. Box C 181.

PERFUMERY REPRESENTATIVE required for Lancashire and Cheshire. Live connection essential. Send full details of past employment, etc., to Sales Director, Grossmith, 45 Piccadilly, W.1. C 1177

PERFUMERY REPRESENTATIVE required for West and South-west London. Live connection essential. Send full details of past employment, etc., to Sales Director, Grossmith, 45 Piccadilly, W.1. C 1178

Pharmaceutical Specialities (May & Baker), Ltd., Dagenham, Essex

Pharmacists with a genuine interest in a career as a medical representative are invited to apply for vacancies in (a) the West London area and (b) Lincolnshire and part of Yorkshire. Experience in hospital pharmacy would be an advantage. These are permanent and progressive appointments and the initial salary will be commensurate with qualifications and experience. Bonus and expense allowance are payable in addition. There is a contributory pension scheme. Candidates should be preferably aged 25-35 years. Apply initially in writing stating particulars of qualifications and experience to the Personnel Officer. C 6804

PHARMACIST preferably with manufacturing experience required for small proprietary medicine business. Write, stating age and experience to Managing Director, George Eade, Ltd., 232 Goswell Road, London, E.C.1. C 183

PHARMACIST required by London House as representative in the Republic of Ireland. Territory approximately north of a line from Dublin to Galway. Applicant must be of good character, industrious and good educational background. A period of training is given. A contributory pension scheme in operation. Full details of age, education and experience, in confidence to Box C 6843.

PHYSICAL CHEMIST required by Macleans, Ltd., to head up a section of its research laboratory in connection with the development (ncluding formulation and processing) of an emulsion product. The position is a permanent one and the company operates a five-day week and generous pension and profit participation schemes. Write in confidence giving fullest details of education, qualifications, age, experience and salary required to Personnel Manager, Macleans, Ltd., Gt. West Road, Brentford, Middlesex. C 6837

PRICING CLERK required; experienced in pricing and extending of drugs, patents, ethicals, sundries. Unusual opportunity for able person, either sex. Apply in writing to Biorex Laboratories, Ltd., 47-51 Exmouth Street (Mkt.), London, E.C.1. C 6854

PROCESS WORKER required for granulating department of firm of tablet makers. Experience preferable but not essential. Apply Matthews & Wilson, Ltd., 6 and 8 Cole Street, S.E.1. C 1149

PROCESSOR, accustomed to manufacture of ointments, emulsions, etc., required. Excellent scope for experienced and industrious person. Apply with full particulars to the Chief Pharmacist, Biorex Laboratories, Ltd., 47/51 Exmouth St., E.C.1. Phone Terminus 9494. C 6839

PRODUCTION MANAGEMENT

THE NESTLE COMPANY LIMITED have vacancies for

Graduates in Chemistry

(age preferably under 35) for production development work. Personality is of importance as production management recruits are ultimately required from this entry. Write, giving details of qualifications and experience and quoting present salary to the Manager, Hayes Factory, Nesfood, Ltd., Hayes, Middlesex. C 6847

REPRESENTATIVES with good connections with chemists, stores, wholesalers, etc., required by manufacturers of toilet preparations for all areas of England (including London, with the exception of a few house accounts), Wales and Northern Ireland. Commission basis. Moderate advertising until sales organisation established and thereafter good national advertising. Excellent opportunity for the right man with an eye on the future. Write in the first instance to Scherk, Ltd., 103 Cannon Street, London, E.C.4, giving details of area covered, period between visits, and type of other lines carried. C 1162

REPRESENTATIVE WANTED with established connections amongst chemists and wholesalers by company of repute who have recently introduced a new hair cosmetic of great potential sales appeal. Good commission. Box C 1169.

SHARP & DOHME, LTD.

Additional Medical Representatives will shortly be required in various areas throughout the country including:—(a) Yorkshire (based on Leeds); (b) Midland Counties; (c) East Lancashire; (d) London area. Applications are invited from men under 35 years of age, with a good pharmaceutical and/or medical background, for these interesting and progressive positions. Previous representative experience not essential as training with full salary will be given. Pension scheme in force. Apply: Sales Manager, Sharp & Dohme, Ltd., Hoddesdon, Herts. C 6830

SALES OFFICE. A vacancy will soon occur in the London sales office of a well-known pharmaceutical manufacturing company. Applications are invited in confidence from young men, age limit 25. Retail experience essential, qualification preferred. Excellent prospects. Full particulars in own handwriting to Sales Director. Box C 6819.

SALESMAN TRAVELLERS. Agents calling upon chemists, having regular and good connections are required for a new nationally advertised toilet product. An easy and quick selling and regular repeat article, top commission paid. Write stating area covered to Box C 1167.

WORKS CHEMIST

Manufacturing Chemists in the Midlands require a Works Chemist. Permanency. Good conditions. Write full particulars, experience, age and salary required to Box C 6867.

WORKS MANAGER

Required shortly. An M.P.S. with good general experience of manufacture and staff control. A keen and efficient man will be suitably recompensed and have ample scope for progress with a well-established firm in London. State age, experience, present salary, etc., and address applications to: The Managing Director, Box C 6829.

WHOLESALE (OVERSEAS)

WELL-KNOWN GROUP of companies in the toilet and pharmaceutical field invites applications from chemists (B.Sc. or A.R.I.C.) and pharmacists (B.Pharm. or Ph.C.) to take up appointments as factory managers in overseas factories. Extensive training will be given in the home factories of the Group during which period the applicant will receive a salary of £750. After posting abroad a four-figure salary plus local allowances will be paid. Box C 6865.

SITUATIONS WANTED

3/- for 18 words (min.) then 2d. per word. Box 1/-

WHOLESALE

EXECUTIVE. Long experience all branches of the pharmaceutical trade, sales, office and factory management, staff control, home and export sales, and their relevant procedure, seeks sound position with good firm. Box C 1153.

MEDICAL REPRESENTATIVE pharmaceutical specialities, well-experienced, medical background, best connections, doctors, hospitals, London area, able to organise propaganda and introduce new products to the medical profession, seeks position with manufacturers. Box C 1117.

AGENCIES

17/6 for 36 words (min.) then 4d. per word. Box 2/-

AGENTS already calling on chemists wanted in some territories for Sasso olive oil which is now packed in tins and bottles. Write with full particulars to Guy, Leonard & Co., Ltd., 8 Carlisle Street, W.1. C 1147

AGENTS calling on retailers required for Wales, East Coast, Cambridgeshire, Bedfordshire, Buckinghamshire, Berkshire, Oxon, Gloucestershire, Durham, North and East Ridings, Yorkshire, Cheshire, for **greatest selling shampoo** heavily nationally advertised. Good commission only. State areas, lines handled and references. Apply to Warner, Harvey & Co., Ltd., 28B Albemarle St., London, W.1. C 6844

AGENTS required by old-established company marketing range of medicated soaps for (1) South Wales; and (2) Kent, Surrey, Sussex and Hampshire. Fullest details with replies which will be treated in strict confidence to Box C 1170.

AGENTS calling on wholesale chemists are wanted to take up new "Homewaving Pack." Good terms offered. Box C 6791.

AGENTS REQUIRED for all territories, by leading manufacturers of toilet rolls and greaseproof packs, also world-renowned brand of Xmas crackers. Must have good connections with wholesalers, co-ops and multiples. Good terms to right men. Box AC 81768, Samson Clarks, 57/61 Mortimer Street, London, W.1. C 157

Agencies—Continued

MANUFACTURERS of nationally advertised up-to-the-minute cosmetic lines require responsible agent for Scotland with well-established connections amongst stores, chemists and hairdressers. Highest commission (20 per cent.). Write in confidence giving experience, age and details to B.G.P. (Cosmetics), Ltd., 37 Chesham Place, London, S.W.1. C 6848

NORTHERN IRELAND. A company of national importance and some years' standing requires thorough representation by an agent having consolidated connection with chemists, stores and better class hairdressers for a well-advertised range of widely accepted proprietaries. High rate commission with some contribution to expenses and long-term arrangement offered right man. Write fully in confidence stating age, experience, other agencies held, number of active retail accounts and length of journey to Box 648, Erwoods, Ltd., 211 Piccadilly, London, W.1. C 6849

BUSINESS OPPORTUNITIES

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CHEMICAL MANUFACTURERS seek to acquire substantial interest in reputable and well-established chemicals export merchant house with view to close collaboration in export markets. Box C 1165.

FOR SALE. Controlling interest in small private company (issued capital £1,000) marketing proprietary nerve tonic. Any person interested please apply to Messrs. H. Graham King & Co., Chartered Accountants, 16 Mumford Court, Lawrence Lane, London, E.C.2. C 6793

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ALL KINDS OF BOTTLES, JARS, SCREW CAPS, cartons, packaging materials and manufacturers' stocks of all kinds bought at fair prices for spot cash. We are buyers of merchandise of EVERY DESCRIPTION. Clearance Stocks, Discontinued lines, Surplus and Redundant Stocks. Should you have anything for disposal, please send us samples and particulars. Reliance Trading Co., 13 New College Parade, Finchley Road, N.W.3. C 153

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THIOGLYCOLLIC ACID, sulph, castor oil, mineral oil, lanette wax, sulph. Fatty alcohols (paste and liquid), acetone, etc., for manufacturing purposes. Box C 1168.

WANTED : Second-hand plant: Ampoule cutting and printing machine; sterilising oven, gas or electrically heated; hand-operated tube filling machine; melting vessels. Apply Biorex Laboratories, Ltd., 47-51 Exmouth Street (Mkt.), London, E.C.1. C 6855

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone:— Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.; Bayswater 4020, 7692. C 140

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FOUR NEW AND UNUSED VACUUM DRYING OVENS of mild steel welded construction, approx. 7 ft. long x 3 ft. 6 in. wide x 3 ft. 6 in. deep, fitted nine steam heated shelves to carry thirty-six acid resisting metal trays, 36 in. long x 16 in. wide x 1½ in. deep. Davit swung door at each end, with hand wheel closing mechanism. Oven complete with set of thirty-six trays, motor driven horizontal wet vacuum pump, pressure and vacuum gauges, and connecting piping.

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STANNINGLEY, NR. LEEDS.
Tel.: Pudsey 2241. C 6835

MODERN CHEMIST SHOP fittings, drug ranges; wallcases and frameless sliding doors, display counters and showcases; all styles of window fittings and display stands. D. Matthews & Son, Ltd., Complete Chemist Shop Fitters and Shop Front Builders, 14-16 Manchester Street, Liverpool. C 141

TEA CHESTS in good condition, 1s. each, ex/London, S.E.5. Box C 6838.

WILKINSON OINTMENT MILL and electric motor in good condition, £50. Two small Hurrell homogenisers; £15 each. Pascall triple roller mill with porcelain rollers, self motorised, £35. Granite triple roller mill with 12 in. x 4½ in. rollers, £30. Robert Blackie, Ltd., Pomeroy Street, London, S.E.14. New Cross 1122. C 6860

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C 1118

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The CHEMIST AND DRUGGIST
APRIL 17 1954



"Welcome, little stranger!"

The lambing season sees a sharp rise in the general demand for 'Phenovis'. Internal worms are one of the sheep farmer's deadliest enemies, and young lambs are particularly susceptible. Recommend your farming customers to dose their lambs when six weeks old, and again a month later; this will see them safely over the critical period, and give them a good start in life.

'Phenovis' is the most satisfactory form of phenothiazine for use on the farm. It readily forms a drench when mixed with water, and can be relied upon to give consistent results.

PACKINGS: 'Phenovis' is issued in containers of 30 grammes, 1 lb., 7 lb., and 56 lb.

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